

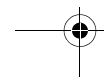
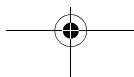
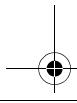
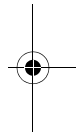
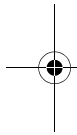
owner's manual

# **Complete 7-Piece Home Theater Audio System**

**with DVD Player and VCR**



# **RCA**



DTS and DTS Digital Out are trademarks of Digital Theater Systems, Inc.



## IMPORTANT INFORMATION



This product contains a low power laser device.

**Warning:** This system employs a laser light beam. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

**Caution:**  INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

### PLACEMENT

- Do not use the player in places which are extremely hot, cold, dusty, or humid.
- Place the player on a flat and even surface.
- Do not restrict the air flow of the player by placing it in an area with poor air flow, by covering it with a cloth, or by placing it on carpeting.

### SAFETY

- When connecting or disconnecting the AC cord, grip the plug rather than the cord itself. Pulling the cord may damage it and create a hazard.
- When you are not going to use the player for a long period of time, disconnect the AC power cord.

### CONDENSATION

When left in a heated room where it is warm and damp, water droplets or condensation may form inside the player. When there is condensation inside the player, the player may not function normally. Let the player stand for one to two hours before turning the power on, or gradually heat the room up and dry the player before use.

**Warning:**

- Should you experience trouble with your player, disconnect the AC power cord and refer servicing to a qualified technician.
- Do not place anything directly on the top of the player. This can result in damage to the player. This product contains a low power laser device.

### REGION MANAGEMENT INFORMATION

This DVD Player is designed and manufactured to respond to the Region Management Information recorded on a DVD. If a DVD's region number does not correspond to the region number of this DVD player, this DVD player cannot play that disc. The Region number of this DVD player is 1 (USA/CANADA).

### UNAUTHORIZED DISCS

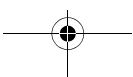
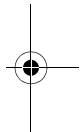
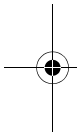
You may not be able to play back some DVDs on this player if they were purchased outside your geographic area or made for business purposes.

### COPYRIGHT INFORMATION

It is forbidden by law to copy, broadcast, show, broadcast on cable, play in public, and rent copyrighted material without permission. DVDs are copy protected, and any recordings made from these discs will be distorted. This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only, unless otherwise authorized by Macrovision Corporation.

Apparatus Claims of U.S. Patent Nos. 4,631,603; 4,577,216; 4,819,098 and 4,907,093 licensed for limited viewing uses only.

This video cassette recorder (VCR) uses only  cassette tapes with NTSC video signal (standard in the U.S.)



# IMPORTANT SAFETY INSTRUCTIONS

**Read Instructions** — All the safety and operating instructions should be read before the appliance is operated.

**Retain Instructions** — The safety and operating instructions should be retained for future reference.

**Head Warnings** — All warnings on the appliance and in the operating instructions should be adhered to.

**Follow Instructions** — All operating and use instructions should be followed.

**Water and Moisture** — The appliance should not be used near water (for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool).

**Carts and Stands** — The appliance should be used only with a cart or stand that is recommended by the manufacturer.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

**Wall or Ceiling Mounting** — The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

**Ventilation** — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a book case or cabinet, that may impede the flow of air through the ventilation openings.

**Heat** — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

**Power Sources** — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**Grounding or Polarization** — Precautions should be taken so that the grounding or polarization means of an appliance are not defeated.

**Power-Cord Protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

**Cleaning** — The appliance should be cleaned only as recommended by the manufacturer.

**Power Lines** — An outdoor antenna should be located away from power lines.

**Outdoor Antenna Grounding** — If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code,

ANSI/NFPA No. 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge player, size of grounding conductors, location of antenna-discharge player, connection to grounding electrodes, and requirements for the grounding electrode.

**Non-use Periods** — Unplug the appliance from the outlet when left unused for a long period of time.

**Object and Liquid Entry** — Care should be taken so that objects do not fall, and liquids are not spilled, into the enclosure through openings.

**Damage Requiring Service** — The appliance should be serviced by qualified service personnel when:

- the power-supply cord or the plug has been damaged.
- objects have fallen, or liquid has been spilled, into the appliance.
- the appliance has been exposed to rain.
- the appliance does not appear to operate normally or exhibits a marked change in performance.
- the appliance has been dropped, or the enclosure damaged.

**Servicing** — The user should not attempt to service the appliance beyond what is described in the operating instructions. All other servicing should be referred to qualified service personnel.

**Attachments** — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

**Accessories** — Do not place this product on an unstable cart, stand tripod, bracket or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.

**Lightning** — For added protection for this product during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

**Overloading** — Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.

**Replacement Parts** — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

**Safety Check** — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

# SAVE THESE INSTRUCTIONS



## FEATURES

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Thank you for purchasing an RCA Complete 7-Piece 100-Watt Home Theater Audio System. Your Home Theater is a great system that incorporates some of the best features in home theater technology. It comes complete with a shielded center-channel speaker, a low pass-type subwoofer, two shielded front-channel speakers, two surround speakers, a remote control, and a receiver equipped with a tuner and a DVD/VCR combo player. The DVD/VCR combo player plays DVD, CD, CDR, CDRW, Picture CDs, MP3 discs, and Video Cassettes.

**Dolby Digital Surround Sound Processing** — lets you use the Home Theatre Audio System for a movie-theater sound experience.

**Digital PLL Tuning** — the DVD's digital phase-locked loop synthesizer provides drift-free frequency tuning with the highest degree of accuracy and stability.

**20 AM/FM Station Memory** — lets you store 20 stations from each band into memory for easy access.

## DOLBY PRO LOGIC

Dolby Pro Logic is a matrix decoder that decodes the four channels of surround sound that have been encoded onto the stereo soundtracks of Dolby Surround program material such as VHS movies and TV shows. Dolby Surround is a matrix encoding process that in essence “folds” Left, Center, Right, and Surround channels onto stereo soundtracks. A Pro Logic decoder “unfolds” the four channels on playback (without a Pro Logic decoder, the encoded program plays in regular stereo).

## DOLBY DIGITAL/DTS

Dolby Digital is a sound system developed by Dolby Laboratories Inc. that gives movie theatre ambience to audio output when the player is connected to a Dolby Digital 5.1 channel processor or amplifier. This player automatically recognizes DVDs that are encoded with Dolby Digital.

Not all Dolby Digital sources are recorded with 6 channels. Some sources marked Dolby Digital may be recorded in Dolby Surround, a 2 channel system.

This player does not decode DTS Digital Surround signals. To enjoy DTS Digital Surround™ playback, an external 5.1 channel DTS Digital Surround decoder system must be connected to the DIGITAL AUDIO OUT jack or OPTICAL OUT jack of the main player.



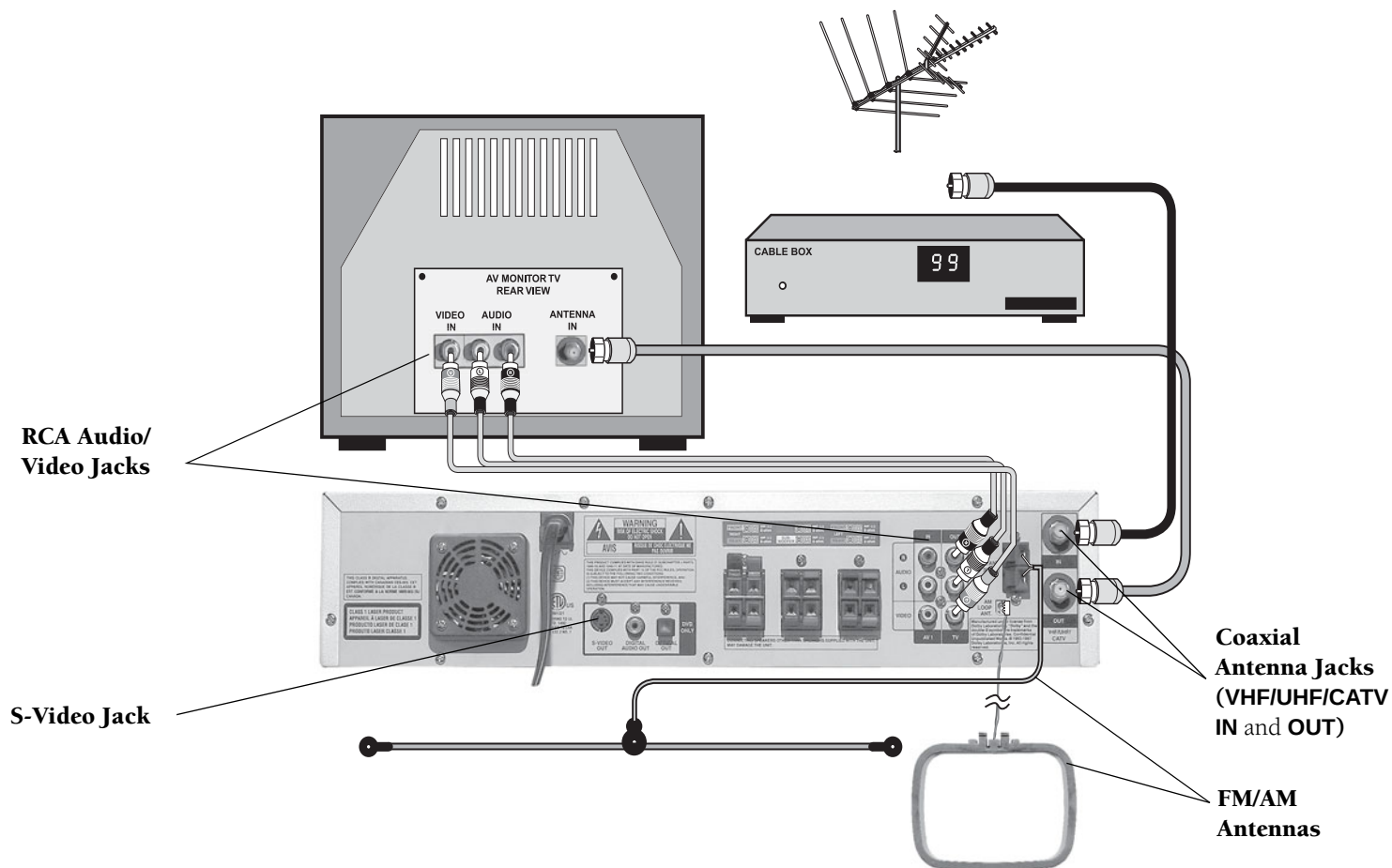
## BEFORE YOU START

You must connect a TV to the system in order to use the system's DVD/VCR combo player. You can connect other audio and audio/visual components to the system in order to use the Home Theater Audio System's surround sound capabilities.

Your system comes with one set of audio/video cables. If you need cables to connect additional components, your local RadioShack store carries a wide variety of audio/video cables, cable boxes, A/B switches and splitters.

## CONNECTING YOUR TV

This player can be connected to your TV in several different ways, depending on your TV's design.



### RCA AUDIO/VIDEO JACKS

Using the supplied audio/video cable, connect the player's TV VIDEO OUT and AUDIO OUT L/R jacks to the VIDEO and left/right AUDIO IN jacks on your TV.

#### Notes:

- If your TV only has one AUDIO IN jack, connect the AUDIO L channel to your AUDIO IN jack.
- If you are setting up your system so sound emanates from the supplied speakers rather than your TV's speaker, you do not need to connect the RCA audio cable to your TV's audio RCA jack.

### S-VIDEO JACK (FOR DVD ONLY)

1. Use an S-Video cable (not supplied, available from RadioShack) to connect the S-VIDEO (DVD) jack on your player to the S-VIDEO IN jack on your TV.
2. Use the supplied audio/video cable to connect the AUDIO OUT L/R jacks to the AUDIO IN jacks on your TV. Do not connect the yellow video plug.

#### Notes:

- The S-Video connection only carries the video signal from DVD playback. It does not carry the VCR's video signal.
- If you connect the DVD player to your TV using the S-Video jack, you must use either the RCA A/V jacks or the Coaxial antenna jacks to connect the VCR to the TV.

## BEFORE YOU START

### COAXIAL ANTENNA JACK

Some TVs do not have an RCA or S-Video jack. They only have a coaxial antenna jack.

1. Connect the TV antenna (coaxial cable, supplied) to the VHF/UHF/CATV IN jack on the rear of the player.
2. Attach one end of the supplied coaxial cable to the VHF/UHF/CATV OUT jack on the rear of the player, and the other end of the cable to the antenna input jack on your TV.

#### Notes:

- When you connect the player to your TV via coaxial alone, there is no audio output from the TV when you play a DVD. Sound only emanates from the connected external speakers.
- To use DVD when the player is only connected with a coaxial cable, the VCR power must be turned on.

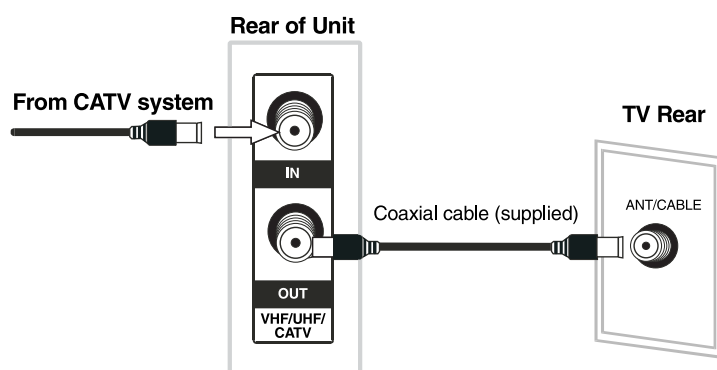
### CABLE TV CONNECTIONS

Your VCR can receive non-scrambled cable channels. Scrambled channels can be received through your cable TV company's cable box.

Be sure to set the VCR's Output Channel before you begin. (See "Setting the Output Channel" on Page 16.)

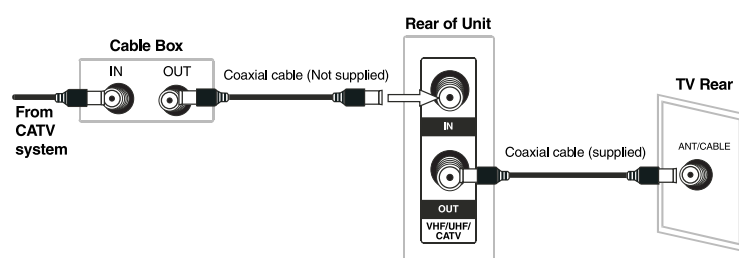
Make the desired connection following the diagrams below, then plug all the necessary components' power cords into outlets.

#### Without a Cable Box

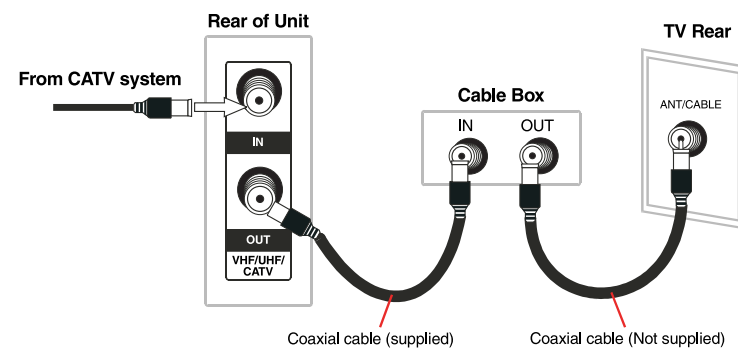


#### With One Cable Box

**Configuration 1:** With this configuration, you can record scrambled channels, but you can only watch the channel you are recording.

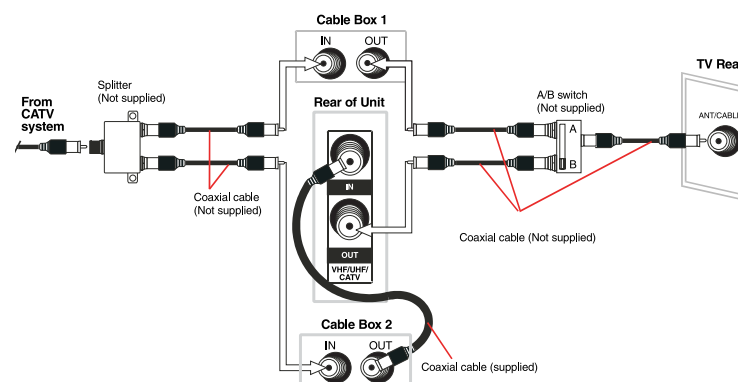


**Configuration 2:** With this configuration, you can watch a different channel than the one you are recording, but you cannot record scrambled channels.



#### With Two Cable Boxes, an A/B switch, and a splitter (neither supplied)

By using an A/B switch and splitter, you can switch between the cable box and the VCR output. For example, while recording a TV program with the VCR, it is possible to watch a CATV program (including descrambled programs) using the A/B switch. The following connection requires two cable boxes, a 2-way splitter and an A/B switch.



This connection is necessary to record a cable TV program (even those scrambled by a cable company) while watching another cable TV program.

Set the A/B switch to A to:

- watch a cable TV program while recording another program.
- watch a cable TV program when the VCR is turned off.

Set the A/B switch to B to:

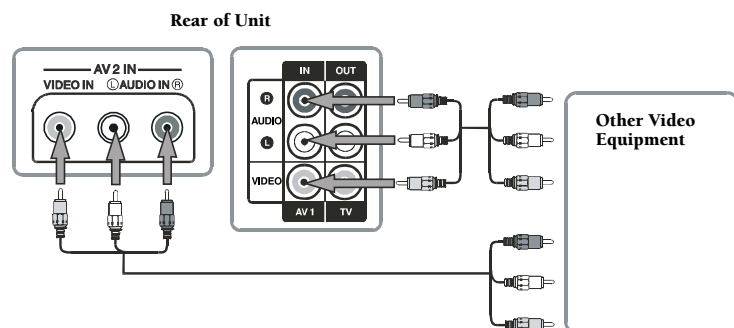
- playback a cassette on the VCR.
- watch a program being recorded, or to change (or watch) channels with cable box 2. The output channel of cable box 2 and the VCR must be the same.

#### Notes:

- If you turn off the cable box, you cannot record or view a CATV program.
- If you have questions regarding your cable connection, please contact your cable company.

## BEFORE YOU START

### CONNECTING TO OTHER VIDEO EQUIPMENT

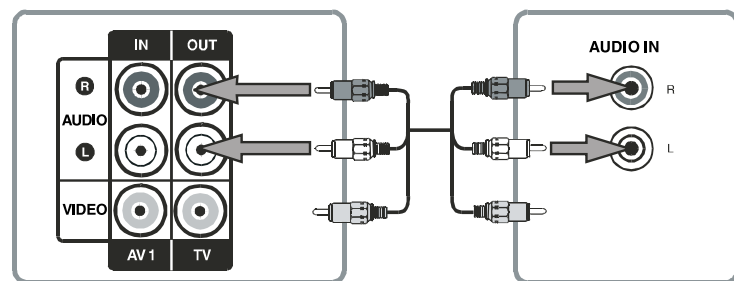


1. Use a video cable (not supplied, available at your local RadioShack store or online at [www.radioshack.com](http://www.radioshack.com)) to connect the TV VIDEO OUT jack on the rear of your player to VIDEO IN jack on your TV.
2. Using the supplied audio/video cable, connect the yellow plug from the AV1 VIDEO IN jack on the rear of your player, or AV2 VIDEO IN jack on the front panel of your player, to the VIDEO OUT jack on the other equipment.
3. Using the supplied audio/video cable, connect the white and red audio plugs from the AV1 AUDIO IN R/L jacks on the rear of your player, or the AV2 AUDIO IN R/L jacks on the front panel of your player, to the AUDIO OUT jacks on the other equipment.

### CONNECTING OTHER AUDIO EQUIPMENT

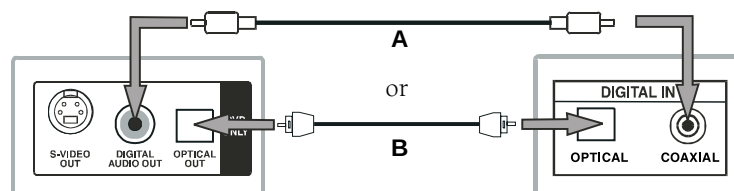
#### ANALOG CONNECTION

Use the supplied audio/video cable to connect the AUDIO OUT L/R jacks on the rear of your player to the AUDIO IN jacks.



#### DIGITAL CONNECTION

- A** Use a coaxial digital audio cable (not supplied, available from RadioShack) to connect the coaxial cable to your other equipment.
- B** Or, use an optical digital cable (not supplied, available from RadioShack) to connect the OPTICAL OUT jack on the rear of your player to the OPTICAL IN jack on your other equipment.



#### Notes:

- If the external equipment is a television and this audio system is close to it, you may experience interference if the TUNER function is selected while the television is working.
- While the VCR is connected to the DVD player, make sure to set your VCR to stereo mode, otherwise the activated speakers may be different than expected. See "Selecting the Listening Channel" on page 30.
- The digital connection is for DVD and VCR only.

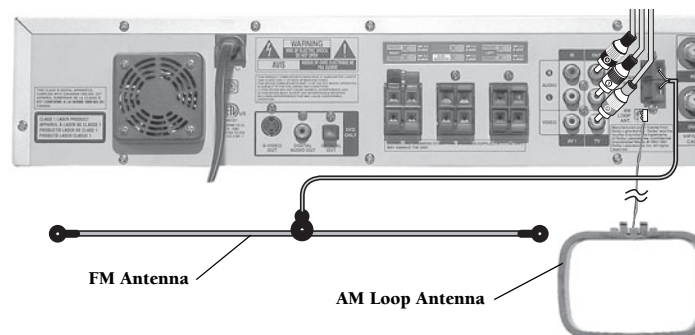
### LISTENING TO OTHER AUDIO EQUIPMENT

1. Turn on the player.
2. Turn on your audio equipment and follow the instructions included with it to select the AUDIO IN or DIGITAL IN function.

### CONNECTING ANTENNAS

#### FM ANTENNA

Press the FM ANT. 300 terminal levers and insert the supplied FM antenna wire ends in the terminal jacks.



#### AM LOOP ANTENNA

1. Insert the supplied loop antenna's plug into AM LOOP ANT. The plug fits only one way. Do not force it.
2. Snap the supplied stand onto the bottom of the AM loop antenna and place it on a flat surface.
3. Keep the antenna as far away as possible from the player, speaker cords, and power cord to prevent unwanted noise.

## BEFORE YOU START

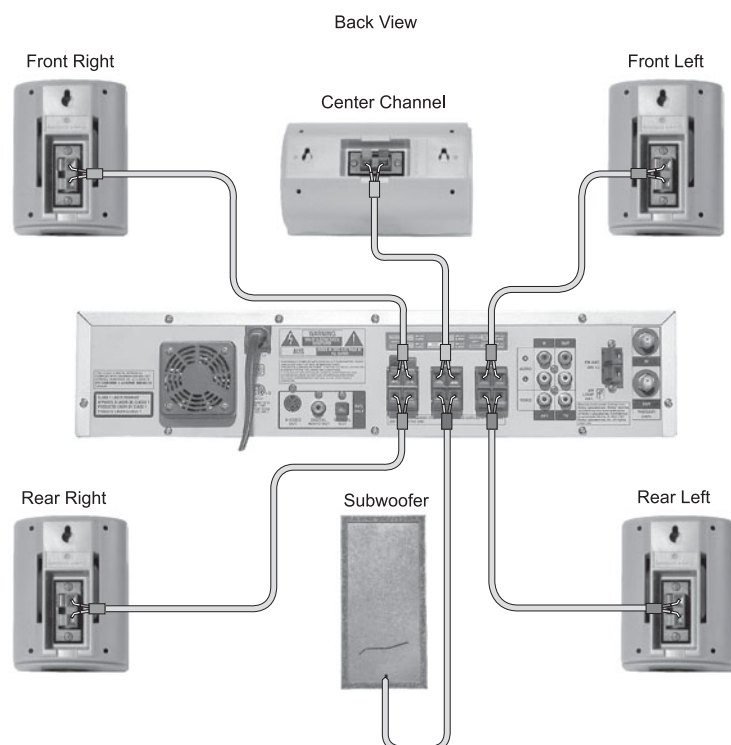
### CONNECTING THE SPEAKERS

The speaker cords have been color-coded to simplify connection. Plug the POSITIVE (+, red) and NEGATIVE (-, black) ends of each speaker wire into the corresponding jacks on the rear of the player, matching the color on the end of the speaker wire to the color-coded connector.

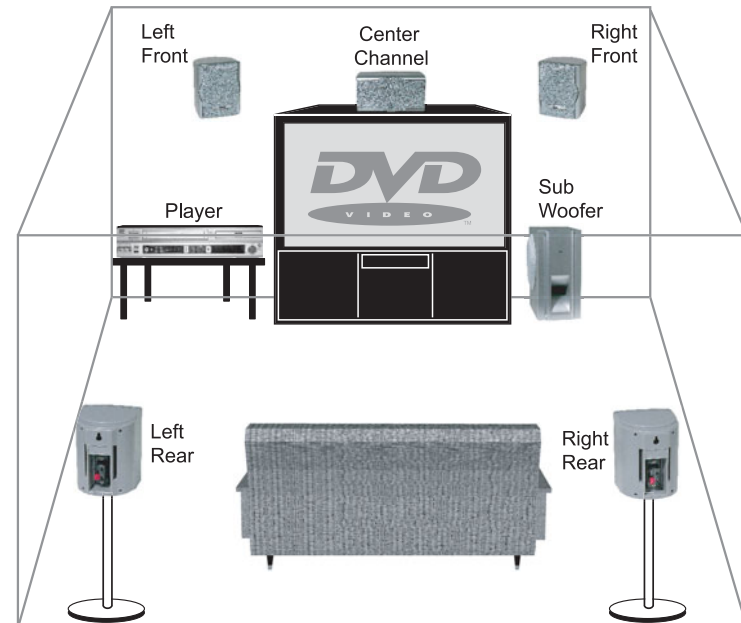
Connect each of the speaker wires to the front, rear, and center speakers respectively.

#### Notes:

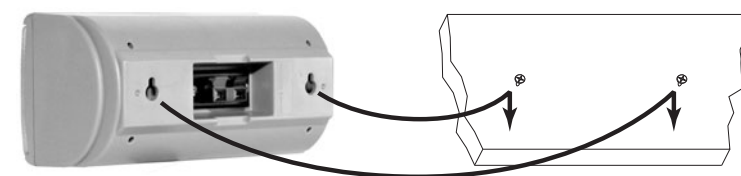
- The positive (red) terminals are on the right.
- The negative wires are marked with black dashes.
- The longer cords are for the rear speakers and the shorter cords are for the front speakers.



### POSITIONING THE SPEAKERS



### MOUNTING SPEAKERS



1. Mark the desired mounting positions on the wall.
2. Insert screws in the marked positions on the wall.
3. Align the speaker's slot holes over the screws and pull the speaker downward until it is firmly hooked.
4. Repeat Steps 1 – 3 to mount each speaker on the wall.

### CONNECTING POWER

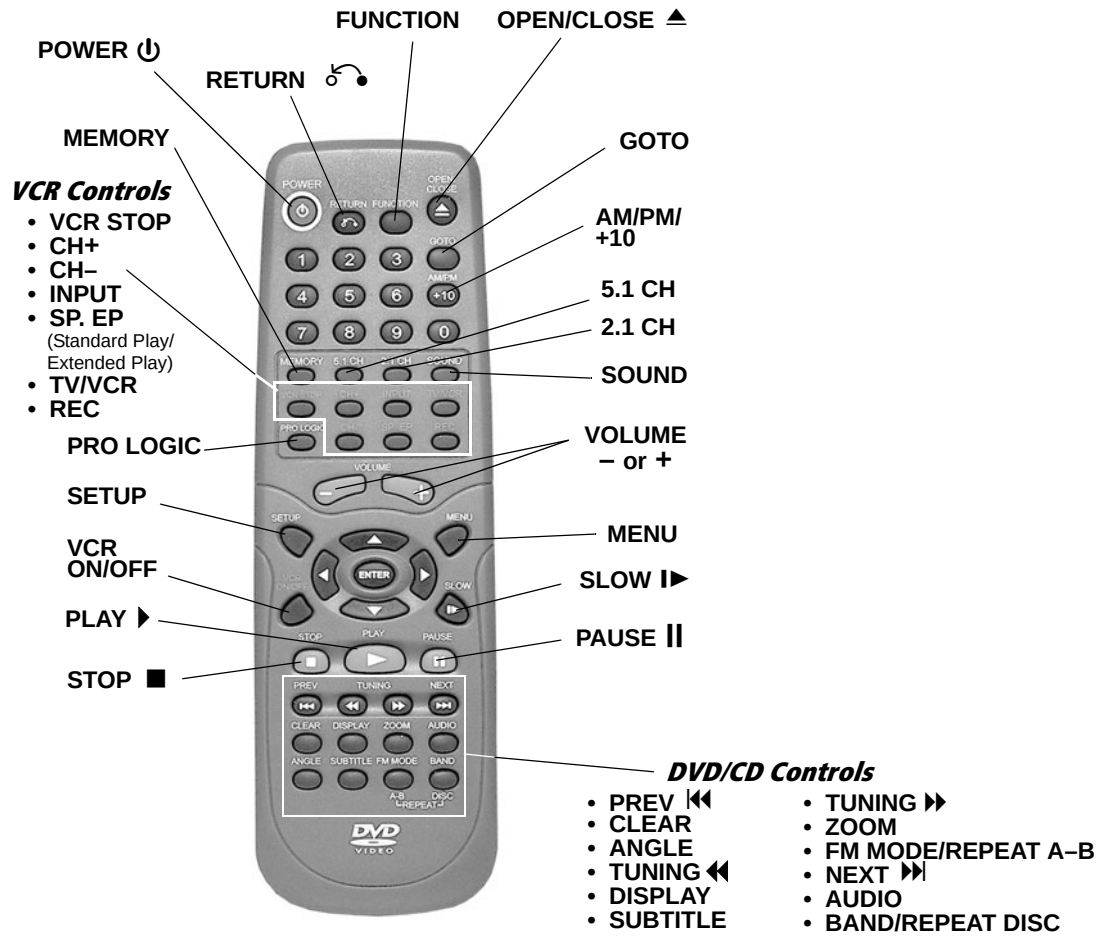
Make sure all the components and speakers are connected correctly.

Match the plug's wide blade to the outlet's wide slot, and insert the plug fully.

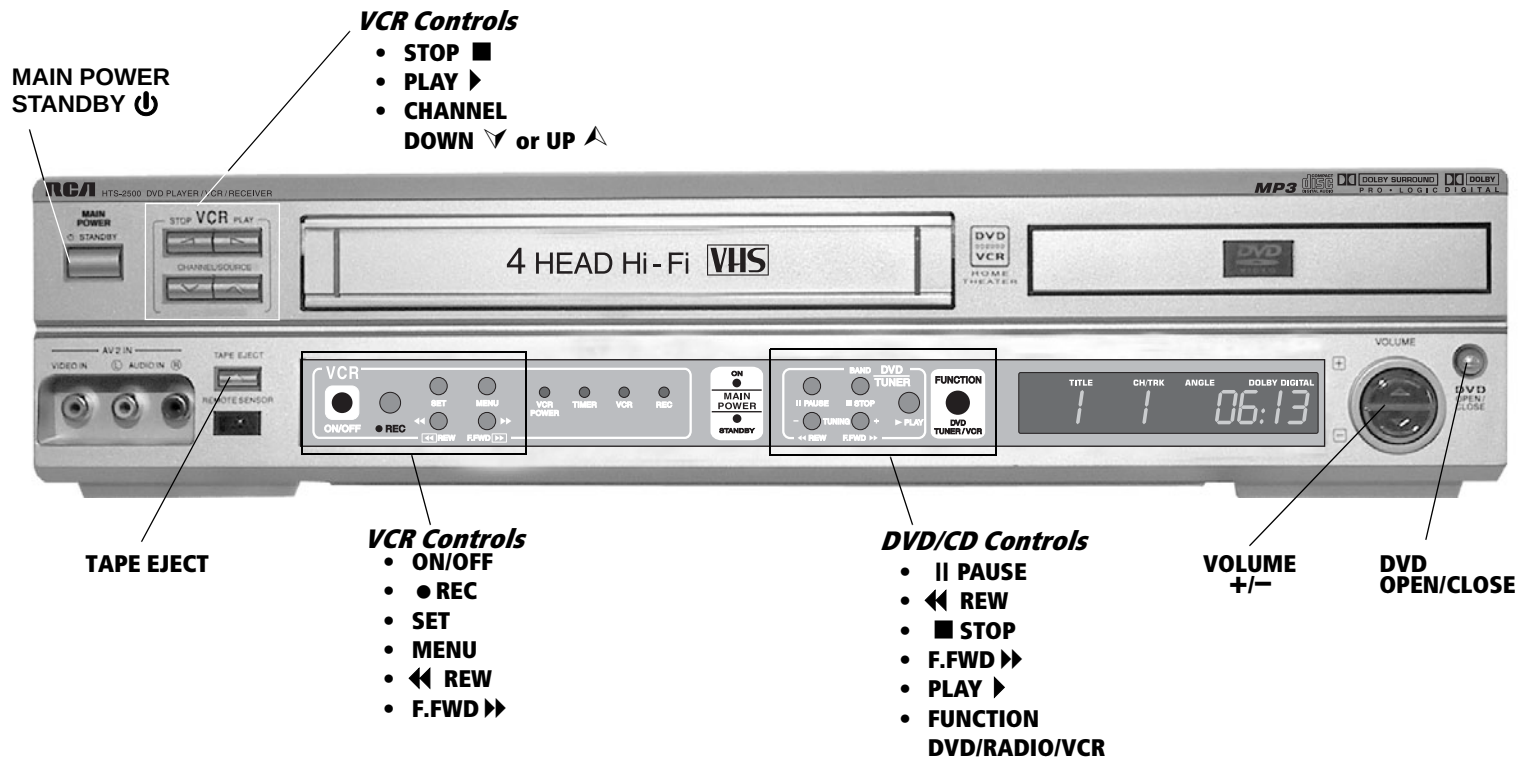
## BEFORE YOU START

### PARTS AND FUNCTIONS

#### YOUR REMOTE



#### YOUR PLAYER



## BEFORE YOU START

### TURNING ON THE PLAYER AND TV

1. Press **POWER**  to turn on the player.
2. Turn on the TV.
3. Select the channel on your TV corresponding to the VIDEO IN jack that the player is connected to. See your TV user guide for more information.
4. If you have connected the player successfully, the DVD logo (startup picture) appears on your TV screen.

### UNAVAILABLE DISC FUNCTIONS AND OPERATIONS

When  appears on the TV screen, the function or operation attempted is not available at that time. This occurs because the DVD manufacturer determines the specific disc functions. Certain functions may not be available on some discs. Be sure to read the documentation provided with the disc.

#### Notes:

- This player supports 2-channel (L/R) audio and 5.1CH (Multi-channel) MPEG audio 1/2 (only when the DIGITAL AUDIO OUT coaxial/optical jack is used for connection). It does not support 7.1 channel MPEG Audio Version 2.0.
- When playing back a CD-G (Graphics) or CD EXTRA disc, you can hear the audio portion, but the graphic images do not appear.

### TITLE, CHAPTER AND TRACKS

DVDs are divided into “Titles” and “Chapters”. If the disc has more than one movie on it, each movie is a separate “Title”. “Chapters” are sections of titles.

Audio CDs are divided into “tracks”. A “track” is usually one song on an audio CD.

Numbers identify each title, chapter, and track on a disc. Most discs have these numbers recorded on them, but some do not.

### INSTALLING BATTERIES IN THE REMOTE CONTROL

Your remote control requires two AA batteries (not supplied) for power. Batteries are available at your local RadioShack store or online at [www.radioshack.com](http://www.radioshack.com).

1. Press the tab on the battery compartment cover and lift the cover off.



2. Place the batteries in the compartment as indicated by the polarity symbols (+ and -) marked inside the compartment.
3. Replace the cover.

When the remote control stops operating properly, replace the batteries.

#### Battery Notes:

- Dispose of old batteries promptly and properly.
- Do not burn or bury batteries.
- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.
- If you do not plan to use the remote control for a month or longer, remove the batteries. Batteries can leak chemicals that can damage electronic parts.

### USING THE REMOTE CONTROL

Point the remote control at the remote sensor located on the player. When there is a strong ambient light source, the performance of the infrared remote sensor may be degraded, causing unreliable operation. The recommended effective distance for remote operation is about 16 feet (5 meters).

## DVD PLAYER OPERATION

This owner's manual explains the basic instructions of this DVD player. Some DVD discs are produced in a manner that allows specific or limited operation during playback. Therefore, the DVD player may not respond to all operating commands. This is not a defect in the DVD player. Refer to the instructions for each disc.

When the DVD disc is stopped, a screen saver is activated if you do not press a button for about two minutes. To return to the normal screen, press any button except **POWER**.

⓪ appears on-screen when a requested operation is not permitted, either by the player or the disc.

1. Press **POWER**  to turn on the player.
2. Press **FUNCTION** until **DVD** appears.
3. Press **OPEN/CLOSE** . The disc tray opens.
4. Place the disc in the tray, label-side up.
5. Press **OPEN/CLOSE** . The disc tray closes.
6. It takes a short while for your player to load the disc. After loading, the player automatically starts playing the disc. If it does not automatically start playing, press **PLAY** .

### Notes:

- Press **OPEN/CLOSE**  to open and close the disc tray. Do not manually push the disc tray in, or you may damage the player.
- Let the disc tray open completely before removing a disc.

## INTERRUPTING PLAYBACK

Press **PAUSE** . **PAUSE** appears on the TV screen. To resume normal playback, press **PLAY** . There is no sound while playback is paused.

## STOPPING PLAYBACK

1. Press **STOP**  to interrupt playback. To resume playback at the position where the disc was stopped, press **PLAY** .
2. Press **STOP**  twice to clear the player's memory.

## FAST FORWARD/FAST REVERSE (DVD/CD)

1. To fast forward or fast reverse, press **TUNING**  or  on the remote (or **TUNING**  or  on the player) while a disc is playing. The disc scans at x2 speed.
2. Repeatedly press **TUNING**  or  to change the speed to x4, x8, or x20.
3. Press **PLAY**  to resume normal playback.

## SKIP (FORWARD/REVERSE) (DVD/CD)

While you are playing a disc, press **NEXT**  to move to the beginning of the next chapter or track.

Press **PREV**  to move to the previous chapter or track and automatically begin playback.

For an audio CD disc, use the number buttons on your remote control to jump straight to that track number.

## SLOW-MOTION PLAY (DVD)

1. While a DVD is playing, repeatedly press **SLOW**  to select **x1/2** or **x1/4** speed.
2. Press **PLAY**  to resume normal playback.

## ZOOMING IN

1. Repeatedly press **ZOOM** while a disc is playing. **Q 1**, **Q 2**, or **Q 3** appears on-screen.
2. While an image is zoomed, press , , , or  to shift the view to the desired part. If you are already at any edge of the image, the display does not shift in that direction again when you press that directional arrow.
3. Press **ZOOM** until **Q OFF** appears and the screen returns to normal.

## AUDIO SELECTION

On some discs, the sound is recorded in two or more formats of multi-channel (5 CH. or 5.1 CH.).

1. While a disc is playing, press **AUDIO** to view the current audio format number.
2. Repeatedly press **AUDIO** to select the desired audio format.

### Notes:

- If only one audio format is recorded, the number does not change.
- You can also change the audio format using the Special Functions. See “**Notes:**” on Page 13.

## DVD PLAYER OPERATION

### SUBTITLE SELECTION

You can select the desired subtitle language for discs with subtitles recorded in multiple languages.

1. While a DVD is playing, press **SUBTITLE** to view the current language setting.
2. Repeatedly press **SUBTITLE** to select a language or turn the subtitles off.  **OFF** appears when subtitles are off.

#### Notes:

- The number of languages recorded differs depending on the disc. If only one language is available, the language does not change.
- If no button is pressed within a few seconds, playback continues without changing the current subtitle.
- You can also change the subtitle using the Special Functions. See “Subtitle Setting” on Page 13.
- On some DVDs, subtitles are activated from the DVD's main menu. Press **MENU** to activate the main menu.

### SPECIAL FUNCTIONS

#### DISPLAY FUNCTION

This function allows you to view and change the current angle, audio, and subtitle settings.

While the disc is playing, press **DISPLAY** twice. **ANGLE**, **AUDIO**, and **SUBTITLE** appear.

From this screen, you can view and change the Angle, Audio, and Subtitle settings.

#### Angle Setting

1. Press **DISPLAY** twice. The function menu appears on the screen.
2. Press **ANGLE** repeatedly to select the desired angle.  
**Note:** If a disc with only one available angle is selected, = **Angle 1/1** appears.
3. Press **DISPLAY** to return to the normal screen.

#### Notes:

- If no button is pressed within 10 seconds, playback continues without changing the current angle.
- The player automatically returns to the default angle when the current scene with multiple angles has finished.

#### Audio Setting

1. Press **DISPLAY** twice. The function menu appears on the screen.
2. Repeatedly press **AUDIO** to select the desired audio setting.

**Note:** The available settings depend on the audio options included on your disc.

3. Press **DISPLAY** to return to the normal screen.

#### Subtitle Setting

1. Press **DISPLAY** twice. The function menu appears on the screen.
2. Repeatedly press **SUBTITLE** to select the desired language. The player changes to the selected language about three seconds later.

**Note:** When a disc with only one subtitle is selected,  **1/1 Eng** appears.

3. Press **DISPLAY** to return to the normal screen.

### GOTO FUNCTION

This function allows you to skip directly to any part of the disc while a disc is playing.

**Note:** To return to the normal screen while setting, press **GOTO**.

#### Locating a Specific Scene (DVD/CD)

You can move to a specific location on the disc by entering its corresponding time (hours, minutes, and seconds).

1. Press **GOTO**.
2. Press **◀**, **▶**, **▲**, or **▼** to highlight **TIME**.
3. Press the corresponding number buttons to enter the time and start playback.
4. Press **ENTER** to confirm. Playback begins in about three seconds.

#### Locating a Specific Title (DVD)

If a DVD disc contains title numbers, you can locate a specific title by directly selecting a title number.

1. Press **GOTO**.
2. Press **◀**, **▶**, **▲**, or **▼** to highlight **TITLE** and press the corresponding number button(s) to select the desired title.
3. Press **ENTER** to confirm. Playback begins in about three seconds.
4. Press **CLEAR** to reset the title number.

## DVD PLAYER OPERATION

### Locating a Specific Chapter/Track (DVD/CD)

If you know the chapter/track number you want to play, you can locate a specific chapter/track by directly selecting a chapter/track number.

1. Press **GOTO**.
2. Press **◀**, **▶**, **▲**, or **▼** to highlight **CHAPTER** and press the corresponding number button(s) for the desired chapter.

**Note:** Press **CLEAR** to reset the title/chapter/track number.

3. Press **ENTER** to confirm. Playback begins in about three seconds.

#### Notes:

- Some discs may not respond to this process.
- Some scenes may not be located as precisely as you specified.
- This method for accessing specific locations is available only within the current title of the DVD disc.
- Press **◀**, **▶**, **▲**, or **▼** to navigate through the menu.
- Press **CLEAR** to reset the time.

### PROGRAMMABLE MEMORY (DVD/CD)

#### DVD TITLE/CHAPTER PROGRAMMED PLAYBACK

1. Press **MEMORY** while the disc is stopped.
2. Press **◀**, **▶**, **▲**, or **▼** to highlight the title and chapter fields.
3. Press the number keys to enter the desired title and chapter numbers.
4. Repeat Steps 2 and 3 to program more titles and chapters.
5. Press **PLAY ▶** to start programmed playback. Or, press **◀**, **▶**, **▲**, or **▼** to highlight **Play Program**. Then press **ENTER** to start programmed playback.

#### Notes:

- Press **STOP ■** twice to clear programmed selections.
- Press **CLEAR** while entering a title or chapter to erase the entered numbers.
- If the number you enter for the title or chapter is invalid for the disc, the player does not recognize the next title or chapter number. Press **CLEAR** to reset the numbers.
- To clear all entered numbers, press **◀**, **▶**, **▲**, or **▼** to highlight **Clear All**. Press **ENTER**.

### CD TRACK PROGRAMMED PLAYBACK

1. Press **MEMORY** while the disc is stopped.
2. Press the number keys to enter the desired track numbers. Press **◀**, **▶**, **▲**, or **▼** to move to other fields.

| Program |      |      |       |
|---------|------|------|-------|
| 1---    | 4--- | 7--- | 10--- |
| 2---    | 5--- | 8--- | 11--- |
| 3---    | 6--- | 9--- | 12--- |

Clear All Play Program

3. Repeat Steps 2 and 3 to program more tracks.
4. Press **PLAY ▶** to begin programmed playback.

**Note:** Press **CLEAR** while entering a title or chapter to erase the entered numbers.

### REPEAT PLAYBACK

#### REPEATING A TITLE OR CHAPTER (DVD)

While a disc is playing, press **REPEAT DISC** until **Repeat Title** or **Repeat Chapter** appears on-screen. The current title or chapter plays repeatedly.

To resume normal playback, press **REPEAT DISC** until **Repeat Off** appears on-screen.

#### REPEATING A SPECIFIC SECTION (DVD)

1. While the disc is playing, press **REPEAT A-B** at the beginning of the section to play repeatedly. **A-B** appears.
2. Press **REPEAT A-B** again at the end of the section. **A-B** appears and the player immediately begins replaying the selection.
3. To resume normal playback, press **REPEAT A-B** until **Off** appears on the screen.

#### Notes:

- A-B repeat can only be used within the same title. If the start and end of the section to be repeated are in different titles, A-B repeat is cancelled.
- The A-B repeat function does not operate in scenes where different camera angles are recorded.

#### REPEATING A SINGLE TRACK OR AN ENTIRE DISC (CD)

1. While the disc is playing, press **REPEAT DISC** until **Repeat Single** or **Repeat All** appears. The current track or disc plays repeatedly.
2. To resume normal playback, press **REPEAT DISC** until **Repeat Off** appears on the screen.

## DVD PLAYER OPERATION

### MP3 AND PICTURE CD PLAYBACK

The player plays MP3 and Picture CDs on CD-R/CD-RW discs.

#### PLAYING AN MP3 DISC

1. Press **OPEN/CLOSE** to open the disc tray.
2. Insert an MP3 disc in the tray with the label side up.
3. Press **OPEN/CLOSE** to close the disc tray. The player loads the disc and playback starts automatically.
4. To pause playback, press **PAUSE** . To resume playback, press **PLAY** .
5. Press the number keys to select the desired file. For example, to enter 56, press **+10** five times, then press **6**.
6. While playing, to skip to the next, or previous, file:
  - press **NEXT** (or **F.FWD** on the player) to skip to the beginning of the next file.
  - press the **PREV** to skip to the beginning of the previous file.
  - press **GOTO** to select the desired track number, then press **ENTER**.
7. To stop, press **STOP** .

#### Notes:

- You cannot fast forward or reverse during MP3 playback.
- During MP3 playback, if you press **STOP** and then press **PLAY** , the player plays from the beginning of the file you stopped.

#### REPEATING A FILE OR THE ENTIRE DISC

To replay a single file, press **REPEAT DISC**. **Rep 1** appears on-screen.

To replay the entire disc, press **REPEAT DISC** again. **Rep All** appears and the player replays all the files.

To cancel the repeat function, press **REPEAT DISC** until **Rep Off** appears.

#### MP3 ON-SCREEN DISPLAY

1. Turn on your TV to view the on-screen MP3 file display.
2. Press **MENU** to view the folder directory.
3. Press , , , or to select the desired folder and press **ENTER**.
4. Press , , , or to select the desired file and press **ENTER**. The selected file plays.

**Note:** The player's ability to read MP3 discs depends on the following:

- The bit rate must be between 64 – 256 kbps.
- The total number of files on the disc should not exceed 254.

- The maximum number of directories should not exceed 32.
- The maximum depth level of directories should not exceed 4.
- Use only letters and/or numbers in file names. If you use special characters, the file and/or folder names may not appear correctly.
- File names should be named using eight or fewer characters and must incorporate the .MP3 file extension. If there are any other file types on the disc, the player will not play the MP3 disc.
- When recording on CD-R discs, use 74-minute (650Mb) discs.
- CD-R/CD-RW discs should be finalized by single session format. See your CD/MP3 creation software for details.

#### PLAYING A PICTURE CD

1. Press **OPEN/CLOSE** to open the disc tray.
2. Place a picture CD in the tray with the label side up.
3. Press **OPEN/CLOSE** to close the disc tray. The player takes a few moments to load the disc.
4. The unit automatically cycles through all the pictures and then returns to the thumbnail image view.

#### Notes:

- Press **MENU** or **STOP** to view thumbnail images.
- Press **NEXT** or **PREV** to scroll and view all images in the thumbnail view. To view one image full-screen, use , , , or to highlight the image. Then press **ENTER**. The selected image appears full-screen.
- The player only reads files with the .JPG extension.
- Press **PLAY** to view one image. Press **PLAY** again to automatically view the images as a slide show. The images appear one by one for a few seconds each.
- Press **PAUSE** to interrupt playback. Press **PLAY** to resume playback.
- Press **ANGLE** to rotate the picture orientation by 90°.
- Press **AUDIO** to change the picture presentation transition setting. (This changes the way the picture views fade in and out.) Select from **TRANS 1**, **TRANS 2**, **TRANS 3**, **TRANS 4**, **TRANS 5**, or **TRANS 6**.



## VCR OPERATION

### VCR SETUP

#### MENU SCREEN

The **MENU** screen is used to select various screen functions. A submenu appears when you select an item from the **MENU**.

1. Turn on the TV and select the video channel.
2. Press **POWER**  and then press **VCR ON/OFF**. The VCR LED lights, and **VCR On** appears.
3. Press **MENU**. The **MENU** screen appears.
4. Press  or  to select an option, and then press **ENTER**.
  - **TIMER** - Setting or checking a timer recording.
  - **SET UP** - VCR operating conditions are set according to the broadcast reception and tape.
  - **CHANNEL PRESET** - Setting the channels.
  - **CLOCK** - Setting the present time.
  - **LANGUAGE** - MENU screen language selection.
5. Press **MENU** to exit.

#### OSD (ON-SCREEN DISPLAY)

To facilitate operation and check the current VCR mode information, the following appears on the TV screen when using this VCR.

|       |              |
|-------|--------------|
| PLAY  | Play         |
| FF    | Fast forward |
| REW   | Rewind       |
| STOP  | Stop         |
| REC   | Record       |
| PAUSE | Record pause |

#### DISPLAYING INDICATORS

Repeatedly press **DISPLAY** to change the on-screen display options.

#### AUTO DISPLAY

When an operation button, numbered button, or **CH+/CH-** is pressed, the current function status, or the number of the channel, appears on-screen for about 3 seconds.

##### Notes:

- When the VCR power is turned off, the display mode is retained in memory.
- When you record a video signal output from this VCR on another VCR, press **DISPLAY** to select **Display Off**. (If the function status appears on-screen, it is also recorded on the tape.)

### SET UP (WITH AUTO CLOCK SETTING)

The Set Up function automatically sets the tuner channels and the clock when the antenna cable is connected to the rear of the VCR before the power plug is connected to an AC outlet.

This VCR can monitor and use EDS time signals, which are provided by some TV stations, to automatically adjust the VCR clock. This VCR automatically searches for EDS signals. To manually set the clock, see “Auto Clock Setting” or “Manual Clock Setting” on Page 18.

##### Important:

- Do not press **VCR ON/OFF** on the VCR or the remote control.
- Do not insert a video cassette into the VCR.
- When using a cable box, leave POWER on the cable box turned on and select a channel that carries EDS signals.
- Make sure that the antenna cable is connected. See “Connecting Antennas” on page 8.

1. Turn on the VCR.
2. The tuner clock and channels are automatically set. The VCR POWER LED flashes quickly to indicate the setting.
3. When the setting is completed, the VCR POWER LED flashes slowly.

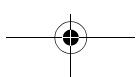
##### Notes:

- If power is supplied to the VCR before the cable/antenna is connected, Set Up is not able to preset the channels into memory. Unplug the VCR from the power source and wait a few minutes. Check the cable/antenna connection and supply power to the VCR. Set Up automatically begins again.
- If the power is turned on during Set Up, the Auto Channel setting is interrupted and the tuner channels are not preset.
- Setting the Auto Clock may take several minutes.
- If the Auto Clock Setting is not completed within 30 minutes, there may be no channels with EDS signals. In this case, set the clock manually. (See “Manual Clock Setting” on Page 18).
- If the antenna signal is weak, the Auto Clock Setting function may not operate.
- During initial channel setting, the channels are set into the AIR channel setting. To watch a cable TV channel, select **CATV** on the **CHANNEL PRESET** screen. (See Setting the Channels.)

### SETTING THE OUTPUT CHANNEL

The Output Channel lets you change the VCR OUTPUT to standard TV broadcasting signals. Both your TV and VCR must be set to the same channel (i.e TV on channel 3 and VCR OUTPUT on channel 3).

**Note:** To use the Output Channel, the player's VHF/UHF/CATV Out outlet must be connected to your TV's ANT/CATV jack with a coaxial cable.



## VCR OPERATION

You can also send the player's information to your TV via the Video Out RCA line. Be sure to set your TV to LINE or a VIDEO channel to view input from the player. Use this option for A/V cable connections.

1. Press **POWER**  to turn the power off.
2. Press **TV/VCR**.
  - If the VCR POWER, TIMER and VCR LEDs flash, the VCR Output Channel is 3.
  - If the VCR POWER, TIMER, VCR and REC LEDs flash, the VCR Output Channel is 4.
3. To change the output channel, hold down **TV/VCR** until the VCR POWER, TIMER, VCR and REC LEDs (or VCR POWER, TIMER and VCR LEDs) flash.
4. Release **TV/VCR**. The Output Channel is set.

### Notes:

- During Set Up, the VCR Output Channel is automatically set.
- If Channel 3 is an active broadcast channel in your area, Channel 4 is set. If Channel 4 is an active broadcast channel in your area, Channel 3 is set.
- To cancel Set Up, press **VCR ON/OFF** during Set Up, before the Output Channel is selected.

## MODE SELECTION

You can use the SET UP selection screen to select the mode for basic features.

1. Turn on the TV and select the video channel. Press **POWER** , press **VCR ON/OFF** (the VCR POWER LED lights), and then press **TV/VCR** to select **VCR** (the VCR LED lights).
2. Press **MENU**.
3. Press  or  to select **SET UP** and press **ENTER**.
4. Press  or  to select **AUTO REPEAT**.
5. Press  or  to select **ON** or **OFF**. (See "Recorded Section Auto Repeat" on Page 23.)
6. Press  to confirm the selection and select **BLUE SCREEN**.
7. Press  or  to select **ON** or **OFF**. (See "Eliminating Blue Screen Noise" on Page 20.)
8. Press  to confirm the selection and select **SAP** (Separate Audio Program).
 

**Note:** SAP is used for bilingual broadcasting. Check your local broadcast station, or cable company, for SAP broadcast availability.
9. Press  or  to select **ON** or **OFF**. (See "Recording Multi-channel TV Sound (MTS) Broadcasts" on Page 21.)
10. Press  to confirm the selection and select **AUDIO OUTPUT**.
11. Press  or  to select **MONO**, **LR**, **L**, or **R**. (See "Audio Output Mode" on Page 20.)

12. Press **ENTER** to confirm the selection and exit.

**Note:** If you press **MENU** to exit the mode selection screen in Step 12, the data is not stored.

## CHANNEL PRESET

Your VCR can receive a maximum of 181 channels by presetting the channels into memory. (VHF: 2 to 13, UHF: 14 to 69, CATV: 1 to 125)

**Note:** Make sure a coaxial cable (antenna or CATV) is connected to the VHF/UHF/CATV IN jack on the rear of the player.

1. Press **MENU**.
2. Press  or  to select **CHANNEL PRESET**. Press **ENTER**.
3. Press  or  to select **AIR** or **CATV**.
4. Press  to confirm the selection and select **CH SET**.
5. Press  or  to select **AUTO**. Press **ENTER**. Auto tuning begins automatically. The screen returns to normal when setting is complete.

### Notes:

- If the power is interrupted for more than 5 seconds, you must start over setting AIR/CATV.
- Automatic tuning is interrupted if **VCR ON/OFF** or **MENU** is pressed before the setting is complete.

## ADDING/ERASING CHANNEL MEMORY

Use this function to manually add or erase channels in the memory.

1. Press **MENU**.
2. Press  or  to select **CHANNEL PRESET**, and press **ENTER**.
3. Press  or  to select **CH SET**.
4. Press  or  to select **MANUAL**, and then press **ENTER**.
5. Press  or  to select **ADD** or **ERASE**.

### Notes:

- Press the number buttons to select a channel to add, or press **CH+**, **CH-** or the number buttons to select a channel to erase.
  - Press  or  to view the status of added and erased channels.
6. Press **MENU** to exit and return to the normal screen.

### Notes:

- If the power is interrupted for more than 5 seconds, the channel memory may be erased. If this happens, reset the channels and the AIR/CATV selection.
- If a button is not pressed for 3 minutes, the screen returns to normal.



## AUTO CLOCK SETTING

Your player automatically sets the clock once the EDS channel is set.

Before you begin:

- make sure the antenna cable is connected and then connect the power cord.
- turn on your TV and select the video channel.
- turn on your VCR.

**Important:** When using a cable box, leave the cable box turned on and select a channel that carries EDS signals.

1. Press **MENU**.
2. Press **▲** or **▼** to select **CLOCK**, and press **ENTER**.
3. Press **▲** or **▼** to select **AUTO**, and press **ENTER**.
4. Press **◀** or **▶** to set **EDS CH SET** to **MANUAL**, and press **▼**.
5. Press **◀** or **▶** to select a channel that carries EDS signals. The number of channels that can be selected depends on the **CHANNEL PRESET** setting.

When using a cable box, select the output channel (03 or 04) on the cable box.

6. Press **ENTER** to confirm your selection and exit. The screen returns to normal.

### Notes:

- When you press **MENU** for the first time, or after the power is interrupted for more than 5 seconds, the **LANGUAGE** screen appears.
- If you select a channel in Step 4 that does not carry an EDS signal, the Auto Clock Setting function does not operate.
- If you entered incorrect data during the setup procedure, repeat Steps 1 – 6 above and enter the correct data.
- The number of channels that can be selected depends on the **CHANNEL PRESET** setting (**AIR** or **CATV**).

| AIR/CATV | Available Channels |
|----------|--------------------|
| AIR      | 02 to 69           |
| CATV     | 01 to 125          |

- If you press **MENU** to exit, the data will not be stored.

## MANUAL CLOCK SETTING

1. Turn on your TV and select the video channel. (See “Setting the Output Channel” on Page 16.)
2. Press **VCR ON/OFF** to turn on the VCR (the VCR POWER LED lights) and press **TV/VCR** to select VCR (the VCR LED lights).
3. Press **MENU**.
4. Press **▼** to select **CLOCK**, and press **ENTER**.
5. Press **▲** or **▼** to select **MANUAL**, and press **ENTER**.
6. Press **◀** or **▶** to select **TIME**.

7. Repeatedly press **▲** or **▼**, or press the corresponding number buttons, to set the time and date.
8. Press the **AM/PM (+10)** to select **AM** or **PM**.
9. Press **▶** to select **DATE**.
10. Repeatedly press **▲** or **▼** to select the desired date.
11. Press **▶** to select **YEAR**.
12. Press **▲** or **▼** to select the desired year.
13. Press **▶** to select **DST**. (See “Automatic Daylight Savings Time (D.S.T.) Adjustment” .)
14. Press **▲** or **▼** to turn DST **ON** or **OFF**.
15. Press **ENTER** to accept the changes and exit.

### Notes:

- When you press **MENU** for the very first time, or after the power is interrupted for more than 5 seconds, the **LANGUAGE** screen appears.
- If you entered incorrect data during the setting procedure, repeat the steps above and enter the correct data.
- If you press **MENU** to exit in Step 15, the data will not be stored.

## AUTOMATIC DAYLIGHT SAVINGS TIME (D.S.T.) ADJUSTMENT

This VCR is equipped with an internal Automatic Daylight Savings Time Adjustment function. In Spring and Fall, the time is adjusted automatically. This function was preset to ON at the factory. Set the D.S.T. mode in the clock setting screen.

**Note:** If the timer recording program is affected by the D.S.T. time change, check your TV listing and find out when it reflects the time change. Some TV listings will indicate the time change in the same manner as is programmed in this VCR. But others do not show the time change until the next morning. In that case, when programming a timer, use the **CLOCK** screen to set the D.S.T. mode to **OFF** so the time change is not carried out.

Spring — Recording timer programs set between 2:00 AM and 3:00 AM are not carried out.

Fall — Because there will be two time frames from 1:00 AM to 2:00 AM, recording timer programs set between these times are not carried out.

## LANGUAGE

When you use the VCR for the first time, or after the power is interrupted for more than 5 seconds (power failure, etc.), you must reset the **MENU** screen language.

1. Turn on your TV and select the video channel. (See “Setting the Output Channel” on Page 16).
2. Press **POWER**  to turn on the player. Press **VCR ON/OFF** (VCR POWER LED lights) to turn on the VCR, and press **TV/VCR** to select the VCR (VCR LED lights).
3. Press **MENU**.



## VCR OPERATION

4. Press **▲** or **▼** to select **LANGUAGE**. Press **ENTER**.
5. Press **▲** or **▼** to select **ENGLISH**, **ESPAÑOL**, or **FRANÇAIS**. Press **ENTER** to confirm and exit.

**Note:** If you press **MENU** to exit in Step 5, your selection will not be stored.

### VCR PLAYBACK

#### INSERTING/REMOVING A VIDEO CASSETTE

**Caution:** Do not insert anything except a **VHS** video cassette into the cassette compartment. Anything else might damage the VCR.

1. Hold the cassette with the main label facing up and the spine facing away from the VCR.
2. Insert the cassette into the VCR's compartment, pushing gently until the VCR draws it in. The VCR turns on automatically and the VCR POWER LED lights.

**Note:** If the cassette is inserted incorrectly, the VCR does not draw it in. Do not force the cassette into the VCR.

To remove the cassette, press **TAPE EJECT** once the cassette is stopped.

#### PLAYBACK

1. Turn on the TV and select the video channel. (See "Setting the Output Channel" on Page 16.)
2. Press **POWER**  to turn on the player, press **VCR ON/OFF** (VCR POWER LED lights) to turn on the VCR, and press **TV/VCR** to select the VCR (VCR LED lights).
3. Insert a cassette.
4. Press **PLAY** . The automatic tracking control system engages and **PLAY** flashes on-screen.
5. To stop playback, press **STOP** .

#### Notes:

- When the tape reaches the end, the VCR automatically stops, rewinds the tape to the beginning, ejects the tape, and turns the VCR power off.
- If the picture still appears distorted after the Automatic Tracking Control System has adjusted the tracking, manually adjust the tracking (See "Manual Tracking Control" on Page 20).
- Press **CH +** or **CH -** during playback to manually adjust the tracking.
- For tapes recorded in EP (Extended Play) on another VCR that still have vertical jitter even after manual adjustment, hold down **PLAY**  for about 2 seconds. Eject the tape or turn off the power to return playback to the normal mode.

#### FAST-FORWARD AND REWIND

1. When the VCR is stopped, press **TUNING**  to fast-forward, or **TUNING**  to rewind, the cassette.
2. Press **STOP**  to stop fast-forwarding or rewinding.

**Note:** The **TUNING**  or  speed may be slower for **VHS** cassettes other than T-60, T-90 or T-120.

#### VIDEO SEARCH

While viewing the picture, use the following procedure to quickly find the section you want.

1. During playback, press **TUNING**  for forward video search or **TUNING**  for reverse video search.
2. Repeatedly press **TUNING**  or  to switch between the two available search speeds.
3. Press **PLAY**  to resume normal playback.

**Note:** There is no sound during video search.

#### SLOW MOTION PLAYBACK

1. Press **SLOW**  during playback.
2. Repeatedly press to switch between 1/5 and 1/30 of the normal playback speed.
  - If noise bars appear on the screen, press **CH +** and **CH -** to adjust the tracking.
  - If the picture experiences vertical jitter during slow motion playback, press **PAUSE** , and press **CH +** or **CH -** to stabilize the picture. Press **SLOW**  again to return to slow playback.
3. Press **PLAY**  to resume normal playback.

**Note:** There is no sound during slow motion playback.

#### STILL PICTURE AND FRAME ADVANCE

1. Press **PAUSE**  during playback to freeze the picture on your TV.
 

**Note:** If the picture experiences vertical jitter, press **CH +** or **CH -** to stabilize the picture.
2. Press **PAUSE**  to advance the film one frame at a time.
3. Press **PLAY**  to resume normal playback.

**Note:** There is no sound during still picture and frame advance.



## VCR OPERATION

### AUTOMATIC TRACKING CONTROL SYSTEM

This function automatically adjusts the tracking to match the recorded tape.

Auto tracking engages when:

- you insert the cassette and begin playback.
- you press **CH +** and **CH -** at the same time.
- the VCR has been playing back an unrecorded section of tape, and then reaches a recorded tape segment. When auto tracking engages, **PLAY** flashes on-screen for a few seconds.

### MANUAL TRACKING CONTROL

When a poorly recorded tape is played or the VCR is near an electrical or magnetic field, auto tracking may not operate normally. In this event, manually adjust the tracking with **CH +** and **CH -** to make any noise disappear.

### ELIMINATING BLUE SCREEN NOISE

This function eliminates monitor noise and mutes sound during playback of unrecorded portions of a tape and when receiving a non-broadcasting channel. Blue Screen will also appear if the VCR is set to the Auxiliary mode but no video signal is fed to the VCR. The default **BLUE SCREEN** setting is **ON**. (To change the Blue Screen setting, see “Mode Selection” on Page 17.)

#### Notes:

- **Blue Screen** does not function during Still Picture, Variable Slow Motion, or Video Search.
- **Blue Screen** does not function during playback of tapes with noise recorded.
- If the antenna signal is weak while recording a TV program or if the input signal is weak while tape dubbing, the monitor screen may turn blue since the player may not recognize whether or not a proper signal is being received. In this event, set **BLUE SCREEN** to **OFF**.

### QUICK START WITH FULL LOADING MECHANISM

Your VCR has a standby function (Full Loading Mechanism) to allow immediate recording and playback.

When in the standby mode, after pressing **REC** or **PLAY**  , it takes about 2 seconds for recording or playback to begin.

### FULL AUTOMATIC PLAYBACK

Full Automatic Playback lets you enjoy playback with ease. When you insert a cassette with the erasure protection tab removed, your VCR automatically turns on the power and plays the tape. When the tape reaches the end, the VCR automatically rewinds the tape, turns the VCR power off, and ejects the tape.

**Note:** If the erasure protection hole is covered, press **PLAY**  after the power turns on automatically.

### AUDIO OUTPUT MODE

Your VCR has 3 channels for audio recording (two on the Hi-Fi track and one on the linear track). You can select the audio output channels in playback mode on the SET UP selection screen. The following shows which audio channels are heard when a Stereo Hi-Fi video cassette is played back while a stereo system is properly connected to the VCR. (See “Mode Selection” on Page 17.)

**Hi-Fi L + R mode** — Both the left (L) and right (R) audio channels are taken from the Hi-Fi audio track. Normally you will not have to change to another mode. (See “Recording Multi-channel TV Sound (MTS) Broadcasts” on Page 21.)

**Hi-Fi L mode (L)** — The left Hi-Fi audio track channel is played back through both speakers.

**Hi-Fi R mode (R)** — The right Hi-Fi audio track channel is played back through both speakers.

**Linear mode (MONO)** — The linear audio track signal is played back through both speakers.

**Note:** When video cassettes recorded on a non-Hi-Fi VCR are played back, the audio signal recorded on the linear audio track is automatically played back, regardless of the audio output mode.

## VCR RECORDING

**IMPORTANT:** THIS PLAYER DOES NOT ALLOW COPYING FROM DVD TO VCR TAPE

### CASSETTE ERASE PROTECTION

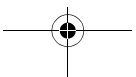
A **VHS** cassette has a removable tab to prevent accidental erasure of recorded material. Removing the tab prevents recording. To record on a video cassette with the tab removed, place adhesive tape over the tab opening.

### RECORDING SPEEDS

You can select either Standard Play (SP) or Extended Play (EP) recording speed. SP provides the best picture quality with a shorter recording time. EP has a longer recording time. Select the tape speed that best suits your needs.

| Cassette/Mode | SP                | EP      |
|---------------|-------------------|---------|
| T-60          | 1 hour            | 3 hours |
| T-120         | 2 hours           | 6 hours |
| T-160         | 2 hours & 40 min. | 8 hours |

**Note:** This VCR can also play back tapes recorded in Long Play (LP) mode.



## VCR OPERATION

### RECORDING FROM A TV

Be sure to turn on the TV and VCR and select the video channel. (See “Setting the Output Channel” on Page 16)

If necessary, set SAP (see “Mode Selection” on Page 17).

*Without a Cable Box or Digital Satellite Receiver:*

1. Insert a cassette.
2. Press **SP/EP** to set the recording speed (SP or EP). (See “Recording Speeds” on Page 20.)
3. Press **CH +** or **CH -**, or press the number buttons, to select the desired channel.
4. Press **REC**. The REC LED lights.

**Note:** If the erasure protection tab has been removed, and the open slot is not covered, the cassette is ejected.

5. To pause recording, press **PAUSE II**. The REC LED flashes.
6. To resume recording, press **PAUSE II** or **REC**. The REC LED lights.

**Note:** To avoid damage to the tape or VCR, PAUSE disengages automatically after about 5 minutes, and the tape stops.

7. Press **STOP ■** to stop recording. The REC LED turns off.

*With a Cable Box or Digital Satellite Receiver:*

1. Insert a cassette.
2. Press **SP/EP** to set the recording speed (SP or EP). (See “Recording Speeds” on Page 20.)
3. Set the TV and VCR channels to the correct output channel for cable box or digital satellite receiver.
4. Set the cable box or digital satellite receiver to the desired channel.
5. Press **REC**. The REC LED lights.

**Note:** If the erasure protection tab has been removed, the cassette is ejected.

6. Press **STOP ■** to stop recording. The REC LED turns off.

#### Notes:

- You cannot watch a scrambled channel while recording.
- **PAUSE** flashes on-screen if you press **PAUSE II** while the tape is stopped.
- The VCR can record a TV program even with the TV turned off.

### WHILE WATCHING ANOTHER TV PROGRAM

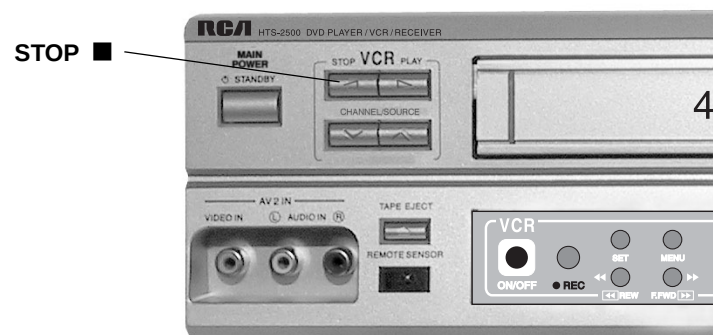
While recording, press the **TV/VCR** button to select TV (the VCR LED turns off). Then select the program you wish to view using the TV tuner.

### RECORDING A PROGRAM WHILE PLAYING A DVD

You can record a cable, antenna, or satellite program and watch a DVD at the same time.

1. Set the VCR to record the desired program.
2. After recording starts, repeatedly press **FUNCTION** until **DVD** appears.

If it is time to stop recording while you’re still watching the DVD, press **STOP ■** on the player to stop recording.



### RECORDING HI-FI STEREO SOUND

Your VCR records audio signals on two types of audio tracks.

**Hi-Fi** — Using specialized rotary heads, audio signals are recorded on the video track in FM format. Multi-sound broadcasts [Stereo or SAP (Separate Audio Program)] are recorded on two channels.

**Linear** — All audio signals are recorded in mono on the linear audio track.

#### Notes:

- Video cassettes recorded on a non Hi-Fi VCR can also be played back. If the audio signals are recorded on two linear channels, stereo programs are played back in monaural and SAP (Separate Audio program) is played back with both the MAIN and SAP audio mixed together.
- Video cassettes recorded on this VCR can be played back on a non-Hi-Fi VCR; however, only the linear track will be playback.

### RECORDING MULTI-CHANNEL TV SOUND (MTS) BROADCASTS

Your VCR can record stereo or SAP broadcasts, where available.

If the broadcast is in stereo, the VCR automatically records the stereo sound in dynamic Hi-Fi. If the broadcast is in SAP, you can record both the MAIN and the SAP sound by setting the SAP mode to ON (see “Mode Selection” on Page 17).



## VCR OPERATION

### MTS/SAP RECORDING

The monitor output listed in the table shows the audio output mode in the Hi-Fi L + R mode.

| Broadcast Received | SAP Mode | Monitor Output |            | Recording   |             |              |
|--------------------|----------|----------------|------------|-------------|-------------|--------------|
|                    |          | L. Speaker     | R. Speaker | Hi-Fi L. CH | Hi-Fi R. CH | Linear Track |
| Stereo             | OFF      | L              | R          | L           | R           | L + R        |
|                    | ON       | L              | R          | L           | R           | L + R        |
| SAP                | OFF      | Main           | Main       | Main        | Main        | Main         |
|                    | ON       | Main           | SAP        | Main        | SAP         | SAP          |
| Stereo/SAP         | OFF      | L              | R          | L           | R           | L + R        |
|                    | ON       | L + R          | SAP        | L + R       | SAP         | SAP          |

### MONITOR OUTPUT WHEN RECEIVING A SAP BROADCAST

When receiving a SAP broadcast, if the SAP position is set to **ON**, change the audio output mode to select Monitor Output (MAIN or SAP). (See “Mode Selection” on Page 17.)

When enjoying a TV program with MAIN sound, select **L**. (See “Mode Selection” on Page 17.)

When enjoying a TV program with SAP sound, select **R** or **MONO**. (See “Mode Selection” on Page 17.)

### TAPE DUBBING CONNECTION INSTRUCTIONS

Your VCR can dub (copy) video material from another video device (except the built-in DVD player). It can also output video and audio signals for recording on other video or audio equipment. Audio/video dubbing cannot be done separately.

1. Switch your VCR to the auxiliary input by repeatedly pressing **INPUT**, until **AV1** or **AV2** appears on screen. AV1 and AV2 are the INPUT jacks from the other video/audio equipment. (You can also press **CHANNEL**  or  on the player, or **CH +** or **CH -** on the remote control.)
2. Begin recording on the dubbing VCR and playing on the source VCR simultaneously.

#### Notes:

- When using special playback functions (Still Picture, Video Search, Frame Advance, or Variable Slow Motion) during dubbing, a blue screen may appear. Set **BLUE SCREEN** on the dubbing VCR (for recording) to **OFF**. (See “Mode Selection” on Page 17.)
- To use the TV as a monitor while dubbing, press **TV/VCR** on the dubbing VCR to select VCR.
- Use an RCA pin-type connection cable (not supplied, available from RadioShack) to connect the source VCR to the dubbing VCR.

- Refer to the manual of the other VCR when dubbing a tape.
- If the source VCR is in monaural mode, connect the audio cable to AUDIO-L on the dubbing VCR.

### SIMPLE RECORDING TIMER

The Simple Recording Timer enables you to set the recording stop time.

Make sure the clock is set before setting the Simple Recording Timer.

**Example:** Recording a TV program in the SP mode. The program is on Channel 2, ending at 9:50 AM. The present time is 8:43 AM.

1. Turn on the TV and select the video channel. (See “Setting the Output Channel” on Page 16.)
2. Insert a cassette. The power turns on automatically and the VCR POWER LED lights.
3. Press **TV/VCR** to select VCR. The VCR LED lights.
4. Set SAP to **ON**, to record an available second language. (See “Setting the Output Channel” on Page 16.)
5. Press the number buttons or **CH +** or **CH -**, to select the desired channel. (EX.: **02**)
6. Press **SPEP** to set the recording speed (SP or EP). (EX.: **SP**)
7. Press **REC** to begin recording. The REC LED lights.
8. Repeatedly press **REC** again to enter the Simple Recording Timer mode. The TIMER LED lights and the recording stop time appears. (EX.: **9:50 AM**)

Each time you press **REC**, the stop time increases by 10 minutes.

**Note:** The recording stop time flashes for a few seconds before the stop time is set.

9. When the stop time is reached, recording stops automatically and the power turns off.

### CHANGING THE CONTENTS OF THE SIMPLE RECORDING TIMER

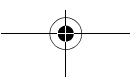
1. Press **REC**. The stop time flashes on the TV screen.
2. Repeatedly press **REC** until the desired stop time appears.

### CANCELING THE SIMPLE RECORDING TIMER

Press **VCR STOP**. The Simple Recording Timer is disabled.

#### Notes:

- The Simple Recording Timer overrides other recordings.
- Ordinary timer programs are not recorded when portions of the simple recording timer and the ordinary timer recording overlap.



## VCR OPERATION

### RECORDING WITH THE TIMER

You can schedule up to eight different timer programs, as far as one year in advance.

You can set your player to record at a set time, even when you're not present. For example: It is 6:35 PM on August 1st, and you want to record a TV program in the SP mode, on channel 7 from 9:05 PM to 10:35 PM on August 10th.

1. Turn on the TV and select the video channel.
2. Insert a cassette with the erasure protection tab opening covered. The power turns on automatically.
3. Press **TV/VCR** to select VCR. The VCR LED lights.
4. Set SAP to **ON**, to record an available second language. (See "Setting the Output Channel" on Page 16.)
5. Press **MEMORY**. The Timer screen appears. Press **ENTER**.
6. Press **▲** or **▼** to select the desired date (EX: **2/18**), and then press **▶**. The cursor moves to the next column.
7. Press **▲** or **▼** to select the desired channel (EX: **07**), and then press **▶**. The cursor moves to the next column.
8. Press **▲** or **▼** to select the recording start time (EX: **9:05 PM**), and then press **▶**. The cursor moves to the next column.
9. Press **AM/PM** to select AM or PM, and then press **▶**. The cursor moves to the next column.
10. Press **▲** or **▼** to select the recording stop time (EX.: **10:35 PM**), and then press **▶**. The cursor moves to the next column.
11. Press **▲** or **▼** to select the tape speed (EX.: **SP**).
12. Press **ENTER** to confirm the setting and move to another setting row.

To program additional timer settings, repeat Steps 2–7.

13. Press **▲** or **▼** to select another setting screen (**1/2** or **2/2**).
14. Press **MENU** to finish settings.
15. Press **VCR ON/OFF** to enter turn off VCR power and enter the Timer Standby mode. The **TIMER LED** lights.

#### Notes:

- The VCR power must be off for the recording timer to function.
- You can also press the number buttons to enter data.
- If you turn on the player to use a function other than the VCR, be sure the VCR power is off.
- If the TV connection is through a coaxial cable, and you are watching a DVD, timer recording is not possible because the VCR must be turned on to view the DVD.
- If the power is interrupted for more than 5 seconds during timer recording, the Auto Clock Setting resets the time after the power turns back on (the VCR POWER LED flashes), but the timer settings are cancelled.

- If the cassette ends before all the programs are recorded, the VCR stops, turns its power off, and ejects the tape automatically.
- If you press **VCR ON/OFF** without inserting a cassette, the **TIMER LED** flashes for 5 seconds to indicate that timer recording is not possible.
- If you insert a cassette without the erasure protection tab, the **TIMER LED** flashes and the cassette is ejected.
- To stop timer recording, press **VCR STOP**.

### CONFIRMING, EDITING, AND CANCELLING TIMER PROGRAMS

Recall the Timer Setting Screen to view a list of programs you have scheduled to record.

1. Press **MEMORY**. The **TIMER** screen appears. Review the displayed information.
2. To change the data, press **▲** or **▼** to select the desired timer program, and then press **ENTER**.
3. Press **▲**, **▶**, **▼**, or **◀** to change the selected timer program's data, and press **ENTER**.
4. Press **CLEAR** to cancel an entry.
5. Press **MENU** to clear all entries.
6. Press **VCR ON/ OFF** to enter the Timer Standby mode. The **TIMER LED** lights.

## SPECIAL FUNCTIONS

### AUTO ENHANCE

1. Repeatedly press **FUNCTION** until **VCR** appears on the player.
2. Press **DISPLAY** twice. **AUTO ENHANCE ON** (or **OFF**) appears on-screen.
3. Press **SET** on the player to switch between **ON** and **OFF**. (The default setting is **ON**.)
  - **ON** — Normally leave the mode set to **ON**. This high picture quality function creates a clearer playback image.
  - **OFF** — Set to **OFF** when playing back a tape on the VCR while editing or when noise appears on the screen.

### RECORDED SECTION AUTO REPEAT

When **AUTO REPEAT** is **ON** (see "Mode Selection" on Page 17), 15 seconds after the recorded portion finishes, the tape automatically stops, rewinds to the beginning, and repeats playback of the selected section.

#### Notes:

- The default **AUTO REPEAT** setting is **OFF**.
- Press **DISPLAY** to see if Auto Repeat is on or off.  appears when Auto Repeat is on.



## VCR OPERATION

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- If Auto Repeat is on when a tape is rewound, the player automatically starts playback when the cassette reaches the beginning.

### SKIP SEARCH

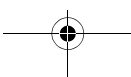
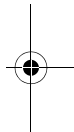
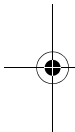
Skip Search lets you set a forward video search time to 30, 50, 90 or 120 seconds of recorded material. After searching, normal playback resumes automatically.

Repeatedly press **NEXT**  on the remote control during playback, to select 30, 50, 90, or 120 seconds.

### INSTANT REPLAY

With this feature, you can set a reverse video search time to approximately 20, 40, 60 or 80 seconds of recorded material. After searching, normal playback resumes automatically.

Repeatedly press **PREV**  on the remote control during playback to select 20, 40, 60, or 80 seconds.





VCR OPERATION

LANGUAGE CODE LIST FOR DISC LANGUAGE

| Code | Language       | Code | Language         | Code | Language       | Code | Language   |
|------|----------------|------|------------------|------|----------------|------|------------|
| AA   | Afar           | GB   | Scots Gaelic     | ML   | Malayalam      | SS   | Siswat     |
| AB   | Abkhazian      | GL   | Galician         | MN   | Mongolian      | ST   | Sesotho    |
| AF   | Afrikaans      | GN   | Guarani          | MO   | Moldavian      | SU   | Sundanese  |
| AM   | Ameharic       | GU   | Gujarati         | MR   | Marathi        | SV   | Swedish    |
| AR   | Arabic         | HA   | Hausa            | MS   | Malay          | SW   | Swahili    |
| AS   | Assamese       | HI   | Hindi            | MT   | Maltese        | TA   | Tamil      |
| AY   | Aymara         | HR   | Croatian         | MY   | Burmese        | TE   | Telugu     |
| AZ   | Azerbaijani    | HU   | Huangarian       | NA   | Nauru          | TG   | Tajik      |
| BA   | Bashkir        | HY   | Armenian         | NE   | Nepali         | TH   | Thai       |
| BE   | Byerlorussian  | IA   | Interlingua      | NL   | Butch          | TI   | Tigrinya   |
| BG   | Bulgarian      | IE   | Interlingue      | NO   | Norwegian      | TK   | Turkmen    |
| BH   | Bihari         | IK   | Inupiak          | OC   | Occitan        | TL   | Tagalog    |
| BI   | Bislama        | IN   | Indonesian       | OM   | (Afan) Oromo   | TN   | Setswana   |
| BN   | Bengali Bangla | IS   | Icelandic        | OR   | Oriya          | TO   | Tonga      |
| BO   | Tibetan        | IT   | Italian          | PA   | Panjabi        | TR   | Turish     |
| BR   | Breton         | IW   | Hebrew           | PL   | Polish         | TS   | Tsonga     |
| CA   | Catalan        | JA   | Japanese         | PS   | Pashto, Pushto | TT   | Tatar      |
| CO   | Corsican       | JL   | Yiddish          | PT   | Portuguese     | TW   | Twi        |
| CS   | Czech          | JW   | Javanese         | QU   | Quechua        | UK   | Ukrainian  |
| CY   | Welsh          | KA   | Georgian         | RM   | Rhaeto-Romance | UR   | Urdu       |
| DA   | Danish         | KK   | Kazakh           | RN   | Kirundi        | UZ   | Uzbek      |
| DE   | German         | KL   | Greenlandic      | RO   | Romanian       | VI   | Vietnamese |
| DZ   | Bhutani        | KM   | Cambodian        | RU   | Russian        | VO   | Volapük    |
| EL   | Greek          | KN   | Kannada          | RW   | Kinyarwanda    | WO   | Wolof      |
| EN   | English        | KO   | Korean           | SA   | Sanskrit       | XH   | Xhosa      |
| EO   | Esperanto      | KS   | Kashmiri         | SD   | Sindhi         | YO   | Yoruba     |
| ES   | Spanish        | KU   | Kurdish          | SG   | Sangho         | ZH   | Chinese    |
| ET   | Estonian       | KY   | Kirghiz          | SH   | Serbo-Croatian | ZU   | Zulu       |
| EU   | Basque         | LA   | Latin            | SI   | Singhalese     |      |            |
| FA   | Persian        | LN   | Lingala          | SK   | Slovak         |      |            |
| FI   | Finnish        | LO   | Laothian         | SL   | Slovenian      |      |            |
| FJ   | Fiji           | LT   | Lithuanian       | SM   | Samoan         |      |            |
| FO   | Faroese        | LV   | Latvian, Lettish | SN   | Shona          |      |            |
| FR   | French         | MG   | Malagasy         | SO   | Somali         |      |            |
| FY   | Frisian        | MI   | Maori            | SQ   | Albanian       |      |            |
| GA   | Irish          | MK   | Macedonian       | SR   | Serbian        |      |            |





## TUNER OPERATION

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### TUNING A STATION MANUALLY

1. Press **POWER** .
2. Repeatedly press **FUNCTION** until the frequency band (AM or FM) appears on the player.
3. Press **BAND** or **STOP**  to select the desired band (AM or FM).
4. Press **TUNING**  or  to tune in the desired station.

### STEREO AND MONO TUNING

To listen in stereo, press **FM MODE** until **STEREO** appears.

To listen in mono, press **FM MODE** until **MONO** appears. Background noise is reduced but the signal reproduced is mono.

**Note:** Only the left/right front speakers and subwoofer are used for mono.

### TUNING A STATION AUTOMATICALLY

Hold down **TUNING**  or  briefly to tune to a station automatically. The player stops searching when it receives a strong signal. The search may not stop at a station with a very weak signal.

### PRESETTING STATIONS

You can tune directly to a stored station by entering the preset number. You can preset up to 20 FM and 20 AM stations.

1. Press **POWER** .
2. Repeatedly press **FUNCTION** until the frequency band appears on the display.
3. Press **BAND** to select the desired band.
4. Press **TUNING**  or  to tune to the desired station.
5. Press **MEMORY**.
6. Repeatedly press **NEXT**  or **PREV**  to select the preset number and press **MEMORY** to store the station.
7. Repeat steps 3-6 to store other stations.

### TUNING TO A PRESET STATION

1. Press **POWER** .
2. Repeatedly press **FUNCTION** until the frequency band appears on the display.
3. Repeatedly press **BAND** to select the desired band.
4. Press **NEXT**  or **PREV**  to select the preset station, or use the numbered buttons to enter the number of the desired preset station.

**Example:** To select preset number 15, press **+10** and **5**. To select preset number 10, press **+10** and **0**.



## CUSTOMIZING FUNCTION SETTINGS

### LANGUAGE SETTINGS

1. Repeatedly press **FUNCTION** until **DVD** appears.
2. Press **STOP** ■.
3. Press **SETUP**.
4. Press ▲ or ▼ to select the language and press **ENTER**.
5. Press **RETURN** ↻ to exit.

### FACTORY SET

You can reset the player to the initial factory default language setting.

1. Press **SETUP**.
2. Press ◀ or ▶ to select **Rating**, and press **ENTER**.
3. Press ▲ or ▼ to select **Factory Set**, and press **ENTER**.
4. Press ▲ or ▼ to select **Yes**, and press **ENTER**.
5. Press **RETURN** ↻ to exit.

**Note:** When you set the player to the Factory Set, it takes a few seconds to return to the initial default setting.

### VIDEO SETTING

#### TV SHAPE

1. Repeatedly press **FUNCTION** until **DVD** appears.
2. Press **STOP** ■.
3. Press **SETUP**.
4. Press ▲ or ▼ to select **Video**, then press **ENTER**.
5. Press ▲ or ▼ to select **TV Shape**, then press **ENTER**.

- **4:3 Pan Scan**

When wide-screen video material is played, this mode clips the right and left sides of the image so that it can be viewed on a conventional TV screen. Some wide-screen DVDs that do not permit Pan Scan mode playback are automatically played in letterbox mode (black bands top and bottom).

- **4:3 Letter Box**

When wide-screen video material is played in this mode on a conventional TV screen, black bands appear at the top and bottom of the screen.

- **16:9 Wide-screen**

This is the correct mode for playing wide-screen videos on a wide-screen TV. You must also set the screen mode on your wide-screen TV to FULL. The actual appearance of the image depends on the screen mode setting of your wide screen TV.

6. Press ▲ or ▼ to select the TV type, then press **ENTER**.
7. Press **RETURN** ↻ to exit and return to the normal screen.

#### Notes:

- The displayed picture size is preset on the DVD. Therefore the playback picture of some DVDs may not conform to the picture size you select.
- When you play DVDs recorded in the 4:3 picture size, the playback picture always appears in the 4:3 picture size regardless of the TV shape setting.
- If you select 16:9 wide-screen mode and your TV set is 4:3, the DVD playback picture is horizontally distorted during playback. Images appear to be horizontally compressed. Always be sure the selected TV shape conforms to your TV.

### VIDEO OUTPUT

1. Repeatedly press **FUNCTION** until **DVD** appears.
2. Press **STOP** ■.
3. Press **SETUP**.
4. Press ◀ or ▶ to select **Video**. Press **ENTER**.
5. Press ▲ or ▼ to select **Video Output**. Press **ENTER**.
6. Press ▲ or ▼ to select the signal. Press **ENTER**.
7. Press **RETURN** ↻ to exit and return to the normal screen.

**Note:** The RGB option is only useful for the European version with a SCART socket.

### BRIGHTNESS

1. Repeatedly press **FUNCTION** until **DVD** appears.
2. Press **STOP** ■.
3. Press **SETUP**.
4. Press ◀ or ▶ to select **Video**. Press **ENTER**.
5. Press ◀, ▶, ▲, or ▼ to select **Brightness**. Press **ENTER**.
6. Press ▲ or ▼ to select **Off/On**. Press **ENTER**.
  - **On:** Picture has raised brightness to clarify details.
  - **Off:** Picture has deepened colors.
7. Press **RETURN** ↻ to exit and return to the normal screen.

**Note:** The actual effect on pictures varies depending on the TV.

If the picture on the TV is distorted and you cannot see the screen, reset the Video Output settings by pressing **OPEN/CLOSE** ▲ to open and then close the DVD tray.

### EDGES

1. Repeatedly press **FUNCTION** until **DVD** appears.
2. Press **STOP** ■.
3. Press **SETUP**.
4. Press ◀ or ▶ to select **Video**. Press **ENTER**.



## CUSTOMIZING FUNCTION SETTINGS

- Press **▲** or **▼** to select **Edges**. Press **ENTER**.
- Press **▲** or **▼** to select **Sharpen**, **Soften**, or **Off**. Press **ENTER**.
  - Sharpen**: Fine detail is easier to see.
  - Soften**: Soft-focus effect.
  - Off**: Picture is returned to normal.
- Press **RETURN** to exit and return to the normal screen.

## AUDIO SETTINGS

### DIGITAL OUT

- Repeatedly press **FUNCTION** until **DVD** appears.
- Press **STOP** .
- Press **SETUP**.
- Press **◀** or **▶** to select **Audio**. Press **ENTER**.
- Press **▲** or **▼** to select Digital Out, and then repeatedly press **ENTER** to select **RAW** or **PCM**.
  - RAW**: Does not have Dolby Digital Decode.
  - PCM**: Has Dolby Digital Decode.
- Press **RETURN** to exit.

### L/R SPEAKER

This selection allows you to select the size of your left and right speakers' cones for optimal performance.

- Repeatedly press **FUNCTION** until **DVD** appears.
- Press **STOP** .
- Press **SETUP**.
- Press **◀** or **▶** to select **Audio**. Press **ENTER**.
- Press **▲** or **▼** to select **L/R Speaker**. Press **ENTER**.
- Press **▲** or **▼** to select **Small** or **Large**. Press **ENTER**.
  - Small**: Speaker cone size diameter is less than five inches.
  - Large**: Speaker cone size diameter is greater than five inches.
- Press **RETURN** to exit and return to the normal screen.

#### Notes:

- You can adjust the channel balance on your player. See "Adjusting Sound Quality" on page 29.
- Included speakers should be set to **Small** for optimal sound quality.

### SUBWOOFER

- Repeatedly press **FUNCTION** until **DVD** appears.
- Press **STOP** .

- Press **SETUP**.
- Press **◀** or **▶** to select **Audio**. Press **ENTER**.
- Press **◀** or **▶** to select **Subwoofer**. Press **ENTER**.
- Press **◀** or **▶** to select the desired setting. Press **ENTER**.
  - On**: Turns on the Subwoofer.
  - Off**: Turns off the Subwoofer.
- Press **RETURN** to exit and return to the normal screen.

**Note:** You can adjust the channel balance on your player. See "Adjusting The Sound" on Page 29.

### SURROUND DELAY

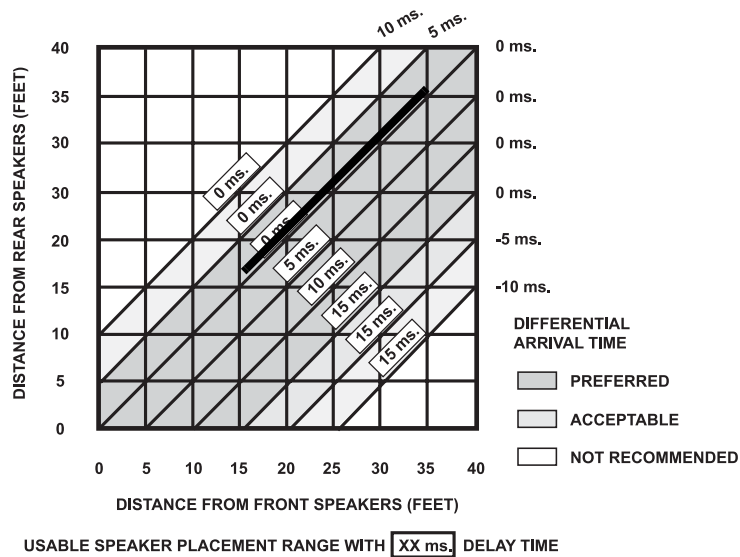
- Repeatedly press **FUNCTION** until **DVD** appears.
- Press **STOP** .
- Press **SETUP**.
- Press **◀** or **▶** to select **Audio**. Press **ENTER**.
- Press **▲** or **▼** to select **Surround Delay**, then repeatedly press **ENTER** until the desired Surround Delay type (**0/15ms**, **5/20ms**, **10/25ms**, or **15/30ms**) appears.

#### Notes:

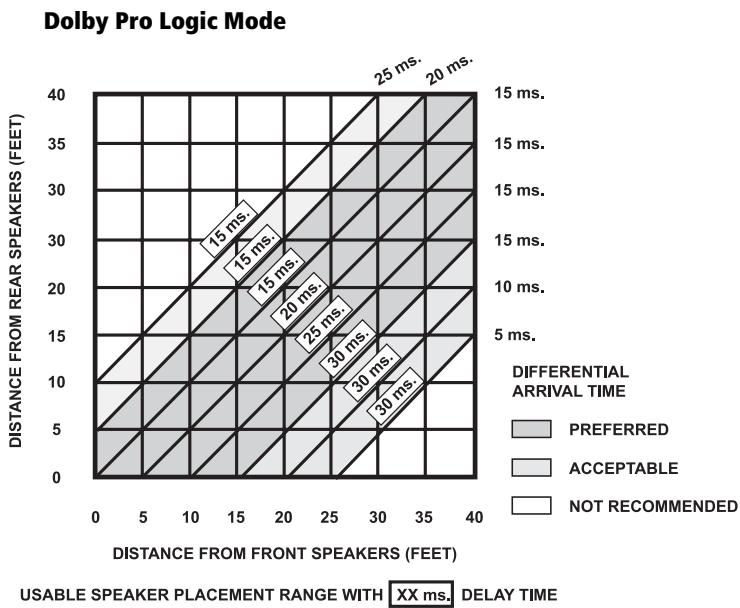
- The first number represents the delay in Dolby Digital mode and the second number represents the delay in Dolby Pro Logic mode.
- The delay adjustment depends on the location of the surround speakers and the front speakers. If the surround speakers are closer than the front speakers, the delay adjustment can compensate for the difference in distance.

Use the following charts to determine the delay setting. Follow the vertical line for distance to your front speakers, and the horizontal line to your rear(surround) speakers. At the intersection, follow the diagonal line to the delay time..

#### Dolby Digital Mode



## CUSTOMIZING FUNCTION SETTINGS



### CENTER DELAY

1. Repeatedly press **FUNCTION** until **DVD** appears.
2. Press **STOP** ■.
3. Press **SETUP**.
4. Press ◀ or ▶ to select **Audio**. Press **ENTER**.
5. Press ▲ or ▼ to select **Center Delay**. Then repeatedly press **ENTER** until the desired Center Delay type (**0ms**, **1ms**, **2ms**, **3ms**, **4ms**, or **5ms**) appears.
6. Press **RETURN** ⏮ to exit and return to the normal screen.

**Note:** This delay adjustment depends on the location of your center speaker. If the distance between the center speaker and the listener is less than the distance between the front right and left speakers and the listener, this delay adjustment is balanced. The relationship depends on the room, for example, if the distance of the center speaker is two feet less than the front right/left speaker, the center delay can be set to 2ms. However, the best setting must be judged by the listener.

### PINK NOISE

This feature lets you test your speakers' output to ensure they are connected and operating properly.

1. Repeatedly press **FUNCTION** until **DVD** appears.
2. Press **STOP** ■.
3. Press **SETUP**.
4. Press ◀ or ▶ to select **Audio**, press **ENTER**.
5. Press ▲ or ▼ to select **Pink Noise**, then press **ENTER**.
6. Press ▲ or ▼ until the desired setting appears, and then press **ENTER**.
  - **Off:** Pink noise test mode should always be off, unless you are

testing your speakers.

- **Left:** The front left speaker emits pink noise.
- **Center:** The center speaker emits pink noise.
- **Right:** The front right speaker emits pink noise.
- **Left Sur:** The rear surround left speaker emits pink noise.
- **Right Sur:** The rear surround right speaker emits pink noise.
- **Subwoofer:** The subwoofer emits pink noise.

7. Press **RETURN** ⏮ to exit.

**Note:** You can press **SOUND** to adjust the channel balance. See "Adjusting The Sound" on Page 29.

## ADJUSTING THE SOUND

### ADJUSTING SURROUND SOUND BALANCE

1. Repeatedly press **SOUND** until the desired speaker appears.
  - Front left speaker — **LEFT** appears.
  - Front right speaker — **RIGHT** appears.
  - Center speaker — **CENTER** appears.
  - Rear left speaker — **REAR L** appears.
  - Rear right speaker — **REAR R** appears.
  - Subwoofer — **WOOFER** appears.
2. Press ▲ or ▼ to adjust the sound level.

If you do not press any buttons within a few seconds, the display returns to normal.

### ADJUSTING SOUND QUALITY

You can control the Bass, Middle, and Treble ranges on your front left and right speakers.

1. Repeatedly press **SOUND** to select an equalization mode (**BASS**, **MIDDLE**, **TREBLE**).
  - **BASS** — low sounds
  - **MIDDLE** — middle sounds
  - **TREBLE** — high sounds
2. Press ▲ or ▼ to adjust the selected sound level.

# CUSTOMIZING FUNCTION SETTINGS

## SELECTING THE LISTENING CHANNEL

While the DVD is stopped, press 5.1 CH or 2.1 CH on the remote control to select a different speaker output status. **5.1 CH** or **2.1 CH** appears.

The following tables show which speakers work in various modes.

| Disc | Audio Menu Settings |           |              | Speakers Output Status |                     |                |           |                   |                    |
|------|---------------------|-----------|--------------|------------------------|---------------------|----------------|-----------|-------------------|--------------------|
|      | 5.1 CH/ 2.1 CH      | Subwoofer | L/R Speaker  | Front Left Speaker     | Front Right Speaker | Center Speaker | Subwoofer | Rear Left Speaker | Rear Right Speaker |
| DVD  | 5.1 CH              | ON        | Small/Large  | On                     | On                  | On             | On        | On                | On                 |
|      | 5.1 CH              | OFF       | Small /Large | On                     | On                  | On             | Off       | On                | On                 |
|      | 2.1 CH              | ON        | Small /Large | On                     | On                  | Off            | On        | Off               | Off                |
|      | 2.1 CH              | OFF       | Small /Large | On                     | On                  | Off            | Off       | Off               | Off                |
| MP3  | N/A                 | ON        | Small /Large | On                     | On                  | Off            | On        | Off               | Off                |
|      | N/A                 | OFF       | Small /Large | On                     | On                  | Off            | Off       | Off               | Off                |

| Sources     | Audio Menu Settings |                      |           |               | Speakers Output Status |                     |                |           |                   |                    |
|-------------|---------------------|----------------------|-----------|---------------|------------------------|---------------------|----------------|-----------|-------------------|--------------------|
|             | Output Channel      | 3 Stereo / Pro Logic | Subwoofer | L/R Speaker   | Front Left Speaker     | Front Right Speaker | Center Speaker | Subwoofer | Rear Left Speaker | Rear Right Speaker |
| Tuner       | N/A                 | N/A                  | N/A       | N/A           | On                     | On                  | Off            | On        | Off               | Off                |
| VCR / AV_IN | 4CH                 | Pro Logic            | ON        | Small         | On                     | On                  | On             | On        | On                | On                 |
|             |                     |                      | ON        | Large         | On                     | On                  | On             | Off       | On                | On                 |
|             |                     |                      | OFF       | Small / Large | On                     | On                  | On             | Off       | On                | On                 |
|             | 3 CH                | 3 Stereo             | ON        | Small         | On                     | On                  | On             | On        | Off               | Off                |
|             |                     |                      | ON        | Large         | On                     | On                  | On             | Off       | Off               | Off                |
|             |                     |                      | OFF       | Small / Large | On                     | On                  | On             | Off       | Off               | Off                |
|             | 2 CH                | OFF                  | ON        | Small / Large | On                     | On                  | Off            | On        | Off               | Off                |
|             |                     |                      | OFF       | Small / Large | On                     | On                  | Off            | Off       | Off               | Off                |

Notes:

- Only the front left and right speakers, and subwoofer are active while using TUNER mode.
- On – The speaker is activated.
- Off – The speaker is not activated.
- Always keep your VCR in stereo mode. Otherwise the speaker output status may be different than the above listed table.
- You can only set 5.1 CH or 2.1 CH while the DVD is stopped.
- The subwoofer is always off when playing stereo DVD discs (not Dolby Digital).
- When the player is set to 5.1 CH, the AUDIO OUT (red and white RCA) jacks provide background sound only. If necessary, change the setting to 2.1 CH when using audio output.
- When the player is in TUNER/AV IN mode, there is no sound output from the AUDIO OUT (red and white RCA) jacks.
- The low frequency response of AUX OUT is dependent on the subwoofer on/off mode in the setup menu.

# CUSTOMIZING FUNCTION SETTINGS

## RATING SETTING

### PASSWORD/PARENTAL LOCK

DVDs equipped with the password function are rated according to their content. The contents allowed by a parental lock level, and the way a DVD can be controlled, may vary from disc to disc.

For example, if the disc allows, you can set up playback to skip over violent scenes unsuitable for children, replace them with more suitable scenes, or lock out disc playback altogether.

1. Repeatedly press **FUNCTION** until **DVD** appears.
2. Press **STOP** ■ .
3. Press **SETUP**.
4. Press ◀ or ▶ to select **Rating**, and press **ENTER**.
5. Press ▲ or ▼ to select **Parental Lock**, and press **ENTER** repeatedly to set the parental lock level.

|                                    |         |          |
|------------------------------------|---------|----------|
| No Restriction<br>Most Restriction | Level 1 | Kid Safe |
|                                    | Level 2 | G        |
|                                    | Level 3 | PG       |
|                                    | Level 4 | PG_13    |
|                                    | Level 5 | PG_R     |
|                                    | Level 6 | R        |
|                                    | Level 7 | NC_17    |
|                                    | Level 8 | Adult    |

-  - Appears when you activate the parental lock feature or change the settings.
-  - Appears when the parental lock is inactive.

6. Press ▲ or ▼ to select **Password**. Press the number keys to enter your code, and press **ENTER**.

**Note:** If you make a mistake before pressing **ENTER**, press **CLEAR** and enter your 4-digit security code again. You cannot play DVD discs rated higher than the level you selected unless you turn the parental lock function off.

7. Press **RETURN** ↵ to exit and return to the normal screen.

If you forget the password, you can erase your current password by pressing **8** on the remote four times, and then pressing **ENTER**.



## TROUBLESHOOTING

### DVD

| Symptom                                           | Cause/Remedy                                                                                                                                                                                                                                                                    |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No Power                                          | Check that the AC power cord is connected.                                                                                                                                                                                                                                      |
| No Picture                                        | The region number of the disc doesn't match the region number of this player.                                                                                                                                                                                                   |
|                                                   | The TV is not set to receive DVD signal output.                                                                                                                                                                                                                                 |
|                                                   | The video cable is not connected.                                                                                                                                                                                                                                               |
|                                                   | The TV is not turned on.                                                                                                                                                                                                                                                        |
| The picture is not clear.                         | Clean the disc.                                                                                                                                                                                                                                                                 |
|                                                   | If video from your system has to go through your VCR to get to your TV, the copy-protection applied to some DVD programs could affect picture quality. If you still experience problems after checking your connections, please try connecting your player directly to your TV. |
|                                                   | The disc is scratched.                                                                                                                                                                                                                                                          |
|                                                   | The location and orientation of the antenna are incorrect. If you use an indoor antenna, switch to an outdoor antenna.                                                                                                                                                          |
|                                                   | The TV antenna wire is too close to the player. Move the TV's antenna wire away from the player.                                                                                                                                                                                |
| No sound or only a very low-level sound is heard. | Check that the speakers and equipment are connected securely.                                                                                                                                                                                                                   |
|                                                   | Make sure that you've selected the correct equipment on the system.                                                                                                                                                                                                             |
|                                                   | The player is in PAUSE, or SLOW-MOTION, mode. Press <b>PLAY</b> to return to normal play mode.                                                                                                                                                                                  |
|                                                   | The player is in FAST-FORWARD, or FAST-REVERSE, mode. Press <b>PLAY</b> to return to normal play mode.                                                                                                                                                                          |
|                                                   | Check the speaker settings.                                                                                                                                                                                                                                                     |
|                                                   | Make sure that the AUDIO output and AV IN input connections are correct.                                                                                                                                                                                                        |
|                                                   | Adjust the speaker volume.                                                                                                                                                                                                                                                      |
|                                                   | The DTS DVD disc cannot be decoded to supply output to the speakers.                                                                                                                                                                                                            |
|                                                   | The player is too hot, shut off the player for 30 minutes to cool down.                                                                                                                                                                                                         |
|                                                   | You can use Pink Noise setting to test the speakers. (See "Pink Noise" on page 29.)                                                                                                                                                                                             |
| Severe hum or noise is heard.                     | Be sure the speakers and equipment are connected securely.                                                                                                                                                                                                                      |
|                                                   | Check that the connecting cords are away from a transformer or motor, and at least 10 feet (3 meters) away from a TV set or fluorescent light.                                                                                                                                  |
|                                                   | Move your TV away from audio equipment.                                                                                                                                                                                                                                         |
|                                                   | The plugs and jacks may be dirty. Wipe them with a damp cloth.                                                                                                                                                                                                                  |
|                                                   | Clean the disc.                                                                                                                                                                                                                                                                 |
|                                                   | Vibrations from the speakers are affecting the player.                                                                                                                                                                                                                          |
| The remote does not function.                     | Remove any obstacles between the remote and the player.                                                                                                                                                                                                                         |
|                                                   | Move the remote closer to the player.                                                                                                                                                                                                                                           |
|                                                   | Point the remote at the player's remote sensor.                                                                                                                                                                                                                                 |
|                                                   | Install new batteries in the remote.                                                                                                                                                                                                                                            |
| The disc does not play.                           | There is no disc inside ( <b>NO DISC</b> appears on-screen).                                                                                                                                                                                                                    |
|                                                   | Insert the disc correctly with the playback side facing down on the disc tray.                                                                                                                                                                                                  |
|                                                   | Clean the disc.                                                                                                                                                                                                                                                                 |
|                                                   | A non-NTSC disc has been inserted. The player and disc region number are incompatible.                                                                                                                                                                                          |
|                                                   | Condensation may have formed inside the player due to a sudden change in temperature. Wait about an hour for it to clear and try again.                                                                                                                                         |
| The DVD door cannot open.                         | Reset the player. Press <b>POWER</b> to turn it off, wait a few seconds, and then restart the player.                                                                                                                                                                           |



TROUBLESHOOTING

VCR

| Symptom                                                                                          | Cause and Remedy                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No power.                                                                                        | Make sure the power cord is plugged in.                                                                                                                           |
| VCR does not receive CATV channels.                                                              | Use the <b>CHANNEL PRESET</b> screen to change from <b>AIR</b> to <b>CATV</b> mode. (See “Channel Preset” on page 17.)                                            |
| VCR does not operate.                                                                            | Turn on the power.                                                                                                                                                |
|                                                                                                  | Press <b>TAPE EJECT</b> several times.                                                                                                                            |
|                                                                                                  | Safety device in VCR is functioning. Unplug VCR and plug it in again after a few minutes.                                                                         |
| VCR does not record.                                                                             | Cassette erasure protection tab is removed. Use a different cassette or place adhesive tape over the tab opening.                                                 |
|                                                                                                  | Check for a cassette loaded in the player.                                                                                                                        |
| No color or poor video quality during normal viewing                                             | Make sure the TV has been selected by pressing TV/VCR button.                                                                                                     |
|                                                                                                  | Make sure all cables are connected properly.                                                                                                                      |
| No tape movement.                                                                                | Make sure the VCR is not in PAUSE mode.                                                                                                                           |
|                                                                                                  | Make sure the tape has not reached the end or beginning.                                                                                                          |
| No picture appears during playback.                                                              | Make sure the TV is set to the same channel as the VCR's output channel (3 or 4, see “Setting the Output Channel” on Page 16.)                                    |
|                                                                                                  | Check to be sure all cables properly connected.                                                                                                                   |
| The recording timer does not work.                                                               | Power may have failed.                                                                                                                                            |
| Noise appears on the screen when the automatic tracking control system is operating.             | Adjust the tracking manually by pressing <b>CH +/-</b> .                                                                                                          |
|                                                                                                  | In some cases, with a worn or damaged tape, noise cannot be eliminated completely.                                                                                |
| Cannot record a signal through the front/rear external input jack.                               | The VCR may not be set to external input mode. Press <b>INPUT</b> to set the VCR to external input mode. (See “Tape Dubbing Connection Instructions” on page 22.) |
| Picture or sound is unstable during playback.                                                    | Keep your VCR away from electrical and magnetic appliances. Be sure to position your VCR at least 8" away from your TV or video monitor.                          |
| Stereo TV puts out monaural sound only, even when cassettes recorded in Hi-Fi stereo are played. | Use RCA pin type connection cables (not the supplied coaxial cable) to connect the TV to the VCR, and set the TV to external video input mode.                    |
|                                                                                                  | Adjust the tracking or try another Hi-Fi stereo. (Any stereo signals recorded on the linear track will not be played in stereo.)                                  |
| Cassettes recorded in stereo mode are not played in stereo.                                      | Make sure the sound was recorded in Hi-Fi stereo. (Any stereo signals recorded on the linear track will not be played in stereo.)                                 |



## CARE

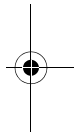
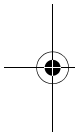
Keep the player dry; if it gets wet, wipe it dry immediately. Use and store the player only in normal temperature environments. Handle the player carefully; do not drop it. Keep the player away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.

**Caution:** You might permanently damage your speakers by cleaning them with a vacuum cleaner. Use a feather duster or a soft loose cloth instead.

**Important:** Before transporting the player, remove the disc from the CD tray.

## CLEANING DISCS

- A defective or soiled disc can cause sound to drop out during playback.
- Handle the disc by holding its inner and outer edges.
- Do not touch the surface of the unlabeled side of the disc.
- Do not stick paper or tape on the surface.
- Do not expose the disc to direct sunlight or excessive heat.
- Clean the disc before playback. Wipe the disc from the center outward with a cleaning cloth.
- Do not use solvents such as benzine or alcohol to clean the disc.
- Do not use irregularly shape discs (example: heart shaped, octagonal, etc.). They may cause malfunctions.



## CLEANING THE VIDEO HEADS

Dirty video heads can cause the playback picture to become blurred even though the audio signal is clear. Video head cleaning kits are available from your local RadioShack store. Clean the heads only when picture quality is affected.

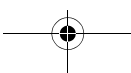
Serious problems require cleaning by a trained technician. For more head cleaning information, contact your local RadioShack store.

## STORING VIDEO CASSETTES

Unless you are making an automatic timer recording, eject and store the cassette before you turn off the VCR. This helps protect the cassette and the VCR's internal mechanisms.

Place your video cassettes in their protective boxes and store them in a cool, dry, dust-free environment. Store the cassettes on end, not on their sides, to prevent improper setting of the cassette's spools.

**Note:** Tape can become wound too tightly around a cassette's spools after playing it many times. This can make the cassette load improperly and eject automatically when you insert it. On most cassettes there is a brake-release plunger on the bottom center of the cassette. Use the tip of a pen or pencil to press the plunger. This loosens the tape.





## THE FCC WANTS YOU TO KNOW

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the *FCC Rules*. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your local RadioShack store or an experienced radio/TV technician for help.
- If you cannot eliminate the interference, the FCC requires that you stop using your player.

Changes or modifications not expressly approved by RadioShack may cause interference and void the user's authority to operate the equipment.





## SPECIFICATIONS



### Player

|                        |                                            |
|------------------------|--------------------------------------------|
| Power Supply           | AC 120V ~ 60Hz                             |
| Power consumption      | 100 W                                      |
| Signal System Standard | NTSC                                       |
| Laser                  | Semiconductor laser, wavelength 650/780 nm |
| Signal-to-noise        |                                            |
| Speaker                | More than 55dB                             |
| Aux out                | 70dB                                       |
| Audio Dynamic Range    | More than 80/80dB                          |
| Harmonic Distortion    | Less than 0.1%                             |
| Operating Temperature  | 41 to 110 F (5 to 43 C)                    |
| Operating Humidity     | 5% to 85% (no condensation)                |
| Video Output / Input   |                                            |
| Output Level           | 1 Vp-p (75W)                               |
| Jack                   | Pinjack                                    |
| Audio Output / Input   |                                            |
| Output Level           | 1.9 Vrms (1kHz)                            |
| Jack                   | Pinjack                                    |

### Speakers

#### Front/Center/Rear

|                    |                                                                          |
|--------------------|--------------------------------------------------------------------------|
| Speaker System     | Bass reflex                                                              |
| Speaker unit (HWD) | Front/Rear 114 x 87 x 108 mm<br>Center 87 x 160 x 106.5 mm (3 inch type) |

|                 |        |
|-----------------|--------|
| Rated Impedance | 8 ohms |
|-----------------|--------|

#### Subwoofer

|                    |                                   |
|--------------------|-----------------------------------|
| Speaker System     | Bass reflex                       |
| Speaker unit (HWD) | 330 x 174 x 320mm (6.5 inch type) |
| Rated Impedance    | 6 ohms                            |

### VCR

|                  |                                  |
|------------------|----------------------------------|
| Recording System | Rotary Two-head Helical Scanning |
| Tape Width       | 1/2 inch                         |
| Tape Speed       |                                  |
| SP               | 1 5/16 Inch/second (33.35 mm/s)  |
| LP               | 2/3 Inch/second (16.67 mm/s)     |
| EP               | 7/16 Inch/second (11.12 mm/s)    |
| Tuner Channels   |                                  |
| VHF              | 2-13                             |
| UHF              | 14-69                            |
| CATV             | 1-125                            |
| Converter Output | 3/4 Channel                      |
| Terminals        |                                  |
| Antenna Input    | F-type                           |
| Antenna Output   | F-type                           |

|                        |                    |
|------------------------|--------------------|
| Video Input/Output     | RCA jack, mini din |
| Audio Input/Output     | RCA jack           |
| Video Output Level     | 1.0 Vp-p           |
| Video Output Impedance | 75 W               |
| Audio Output Level     | - 8 dBV            |
| Audio Output Impedance | 1k W               |
| Video Input Level      | 05-2.0 Vp-p        |
| Video Input Impedance  | 75 W               |
| Audio Input Level      | - 8 dBV            |
| Audio Input Impedance  | 47k W              |

|                            |       |
|----------------------------|-------|
| Video S/N Ratio (weighted) |       |
| SP                         | 39 dB |
| EP                         | 37 dB |

|                 |        |
|-----------------|--------|
| Audio S/N Ratio |        |
| SP              | 47 dB  |
| LP              | 20 bHz |
| EP              | 45dB   |

|                    |               |
|--------------------|---------------|
| Frequency Response | 100 Hz-10k Hz |
|--------------------|---------------|

|                  |                   |
|------------------|-------------------|
| Dimensions (HWD) | 96 x 430 x 370 mm |
|------------------|-------------------|

|        |      |
|--------|------|
| Weight | 8 Kg |
|--------|------|

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

### Limited Two-Year Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for two (2) years from the date of purchase from RadioShack company- owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX 76102

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